
ANNUAL

TACOMA WATER

2016

**FINANCIAL
REPORT**



Public Utility Board

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DEPARTMENT OF PUBLIC UTILITIES

CITY OF TACOMA

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES

TACOMA WATER

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FINANCIAL DATA

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REPORT OF INDEPENDENT AUDITORS

The Chair and Members of the Public Utility Board
City of Tacoma, Washington Department of Public Utilities, Water Division
Tacoma, Washington

Report on the Financial Statements

We have audited the accompanying financial statements of City of Tacoma, Washington Department of Public Utilities, Water Division (the Division), which comprise the statements of net position as of December 31, 2016 and 2015, and the related statements of revenue, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

REPORT OF INDEPENDENT AUDITORS (continued)

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Division as of December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis on pages 5 through 14, schedule of proportionate share of net pension liability, and schedule of the city of Tacoma's contributions employer contributions on page 50 be presented to supplement the basic financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The statistical data presented on pages 51 through 71 and the superintendent's report presented on pages 72 through 84 are presented for purposes of additional analysis and are not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we express no opinion on it.



Tacoma, Washington

April 19, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of Tacoma Water's financial performance provides an overview of the financial activities for the years ended December 31, 2016 and 2015. This discussion and analysis is designed to assist the reader in focusing on the significant financial issues, provide an overview of the financial activities, and identify changes in the financial position. We encourage readers to consider the information presented here in conjunction with the financial statements and notes taken as a whole.

The management of the Finance Department of the City of Tacoma is responsible for preparing the accompanying financial statements and for their integrity. The statements were prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America, applied on a consistent basis, and include amounts that are based on management's best estimates and judgments.

The basic financial statements, presented on a comparative basis for the years ended December 31, 2016 and 2015, include Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, and Statements of Cash Flows. The Statements of Net Position present information on all of Tacoma Water's assets, deferred outflows of resources, liabilities, and deferred inflows of resources with the difference being reported as net position. The Statements of Revenues, Expenses and Changes in Net Position report all of the revenues and expenses during the time periods indicated. The Statements of Cash Flows provide information on cash receipts and disbursements during the year and report changes in cash resulting from operating, non-capital financing, capital and related financing, and investing activities.

The Notes to Financial Statements provide additional disclosures that are essential to a full understanding of the data provided in the financial statements. They are an integral part of Tacoma Water's presentation of financial position, results of operations and changes in cash flows.

The Division adopted GASB Statement No. 72, *Fair Value Measurement and Application*, during fiscal year 2016. The statement provides guidance for determining fair value to certain investments and disclosures related to all fair value measurements, and requires accounting for investments at fair value (See note 3).

Financial Highlights

- The net position of Tacoma Water was \$549.7 million in 2016, \$542.5 million in 2015 and \$516.7 million in 2014. Of these amounts, \$57.1 million in 2016, \$53.8 million in 2015, and \$46.7 million in 2014 is reported as Unrestricted net position and is available to finance day-to-day operations without constraints established by debt covenants or other legal requirements.
- Tacoma Water's total net positions increased by \$7.2 (1.3%) million in 2016, \$24.7 (4.8%) million in 2015 and \$36.4 (7.6%) million in 2014.

- Operating revenues were \$92.8 million in 2016, a decrease of \$5.3 million (5.4%) compared to 2015. While sales and other revenue increased by \$1.5 million, contract resource obligation revenue decreased by \$6.9 million. The decrease in contract resource revenue is primarily due to a shift in focus from building the Green River Filtration Facility to operating the facility and the partners were billed accordingly. Operating revenues were \$98.1 million in 2015, a decrease of \$0.2 million (0.2%) compared to \$98.3 million in 2014. While sales revenue increased by \$7.3 million, contract resource obligation revenue decreased by \$7.5 million because the Green River Filtration Facility is complete and the partners were billed less.
- In 2016, Tacoma Water's net utility plant of \$879.5 million represented a decrease of \$5.2 million (0.6%) compared to the 2015 \$884.7 million balance. This is primarily due to a net increase of \$15.5 million in plant in service offset by an increase in accumulated depreciation of \$20.6 million. In 2015, net utility plant was \$884.7 million, \$12.6 million (1.4%) more than 2014's \$872.1 million balance. Major projects contributing to the increase include the Green River Water Filtration Facility and Main Replacements.

Overview of the Financial Statements

Tacoma Water reported net operating income of \$17.4, \$34.6 and \$39.8 million in 2016, 2015 and 2014 respectively. In 2016, operating revenues decreased by \$5.3 million and operating expenses increased \$11.8 million. For 2015, operating revenues decreased by \$0.2 million and operating expenses increased \$5.0 million.

The following tables highlight Tacoma Water's past three years' operating results and gallons billed.

Operating Results (In thousands)

Category	2016	2015	2014	16/15 Increase (Decrease)	15/14 Increase (Decrease)
Operating Revenues	\$ 92,802	\$ 98,139	\$ 98,320	\$ (5,337)	\$ (181)
Operating Expenses	75,356	63,588	58,557	11,768	5,031
Net Operating Income	17,446	34,551	39,763	(17,105)	(5,212)
Net Non-Operating Income (Expense)	(17,395)	(15,595)	(9,657)	(1,800)	(5,938)
Capital Contributions	10,274	9,053	8,671	1,221	382
Federal BAB Subsidies & Grants	3,579	3,610	3,959	(31)	(349)
Transfers Out	(6,754)	(6,874)	(6,352)	120	(522)
Change in Net Position	\$ 7,150	\$ 24,745	\$ 36,384	\$ (17,595)	\$ (11,639)

Gallons Billed
(In millions)

Type of Customer	2016	2015	2014	16/15 Increase (Decrease)	15/14 Increase (Decrease)
Residential	8,351.1	8,483.5	7,970.7	(132.4)	512.8
Commercial & Industrial	8,763.4	9,140.7	9,187.2	(377.3)	(46.5)
Wholesale	1,275.6	1,881.1	1,185.6	(605.5)	695.5
Total	18,390.1	19,505.3	18,343.5	(1,115.2)	1,161.8

Net Position

Net position may serve over time as a useful indicator of an entity's financial position. The analysis highlights net position for the last three years.

Statements of Net Position
(In thousands)

Description	2016	2015	2014	16/15 Increase (Decrease)	15/14 Increase (Decrease)
Net utility & Non-Utility Plant	\$ 880,041	\$ 885,214	\$ 872,576	\$ (5,173)	\$ 12,638
Current & Other Assets	228,621	212,475	208,947	16,146	3,528
Total Assets	1,108,662	1,097,689	1,081,523	10,973	16,166
Deferred Outflows	10,623	4,003	1,588	6,620	2,415
Total Assets & Deferred Outflows	\$1,119,285	\$1,101,692	\$1,083,111	\$ 17,593	\$ 18,581
Net Position:					
Net Investment in Capital Assets	\$ 490,052	\$ 485,977	\$ 468,209	\$ 4,075	\$ 17,768
Restricted	2,496	2,733	1,797	(237)	936
Unrestricted	57,104	53,792	46,667	3,312	7,125
Total Net Position	549,652	542,502	516,673	7,150	25,829
Long-Term Debt	478,617	478,401	483,542	216	(5,141)
Current & Other LT Liabilities	54,919	44,283	47,321	10,636	(3,038)
Total Liabilities	533,536	522,684	530,863	10,852	(8,179)
Deferred Inflows	36,097	36,506	35,575	(409)	931
Total Net Position, Liabilities & Deferred Inflows	\$1,119,285	\$1,101,692	\$1,083,111	\$ 17,593	\$ 18,581

Revenues

Tacoma Water's operating revenues were \$92.8 million in 2016, a decrease of \$5.3 million (5.4%) compared to 2015. Sales of water increased in 2016 by a net of \$1.0 million of which \$4.2 million is due to an average rate increase of 4.0% effective January 1, 2016 and a decrease in usage of \$3.2 million. This is offset by a decrease in contract resource obligations of \$6.9 million. Regional Water Second Supply (RWSS) Partners reimbursed Tacoma Water for the final expenses related to building the Green River Filtration Facility in the first quarter of 2016. Contract resource revenue for the remainder of the year includes recovery of primarily O&M related expenses, resulting in a net reduction.

Operating revenues were \$98.1 million in 2015, a decrease of \$0.2 million (0.2%) compared to 2014. Sales of water increased in 2015 by \$7.3 million of which \$1.2 million is due to an average rate increase of 4.0% effective April 1, 2015 and \$6.0 million is due to an increase in usage. This is offset by a decrease in contract resource obligations of \$7.5 million. The construction of the Green River Filtration Facility is complete and the partners were billed less.

The following table highlights water sales by type of customer for 2016, 2015 and 2014.

Type of Customer	Water Sales (In thousands)			16/15	15/14
	2016	2015	2014	Increase (Decrease)	Increase (Decrease)
Residential & Domestic	\$ 50,742	\$ 48,263	\$ 44,656	\$ 2,479	\$ 3,607
Commercial & Industrial	17,559	17,234	15,406	325	1,828
Special Rate	5,846	5,951	5,802	(105)	149
Wholesale	3,972	5,192	3,718	(1,220)	1,474
Unbilled Revenue	(138)	319	121	(457)	198
Total	\$ 77,981	\$ 76,959	\$ 69,703	\$ 1,022	\$ 7,256

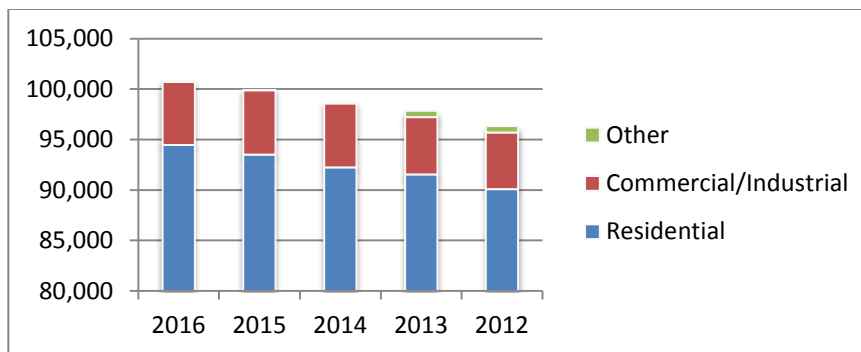
Approximately 65.1%, 62.7% and 64.1% of water sales were to residential and domestic customers in 2016, 2015 and 2014 respectively. Commercial and industrial sales were 22.5%, 22.4% and 22.1% of total sales for each year. Special rate sales were 7.5%, 7.7%, 8.3% of sales respectively.

Customers

Over the last five years, the overall number of customers has remained relatively stable. In 2016, 93.8% of all customers were residential compared to 93.6% in 2015 and 93.5% in 2014. Commercial and industrial customers were 6.2% of all customers in 2016, 6.4% in 2015 and 6.5% in 2014.

Below is a graphical representation of the number of customers by customer type for the last 5 years.

Number of Customers

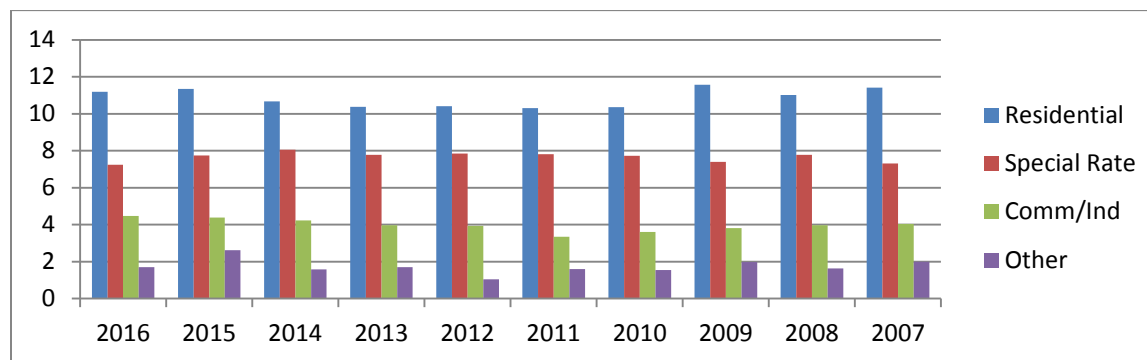


Water Users

Tacoma Water generates the majority of its revenues from its residential and domestic customer base. Consumption is measured in 100 cubic feet (CCF). In the years 2016, 2015 and 2014 residential customers used 11.2 million CCF (45.5%), 11.3 million CCF (43.5%) and 10.7 million CCF (43.4%) of total sales respectively. Special Rate customers used approximately 7.2 million CCF (29.4%), 7.7 million CCF (29.7%) and 8.1 million CCF (33.0%) respectively. Commercial and industrial customers used 4.5 million CCF (18.2%), 4.4 million CCF (16.8%) and 4.2 million CCF (16.8%) respectively. The remaining 1.7 million CCF (6.9%), 2.6 million CCF (10.0%) and 1.6 million CCF (6.8%) respectively was consumed by other customers.

Below is a graphical representation of the annual water usage by customer type for the last 10 years.

Annual Water Usage
(In millions of CCF)



Expenses

In 2016, operating expenses increased \$11.8 million (18.5%), compared to an increase of \$5.0 million (8.6%) in 2015. Source of Supply saw expenses returning to normal in 2016. Increased use of in-town wells due to the 2015 drought caused a labor shift from other sections of Tacoma Water to focus on operating the wells. In 2016, the wells were used significantly less which resulted in a decrease in expenses of \$0.5 million (6.4%) when compared to 2015. Similarly, the cost to pump the well water decreased by \$0.3 million (34.0%), as well as the costs related to Transmission and Storage which decreased by \$0.1 million (1.9%).

Treatment experienced an increase of \$1.8 million (37.1%) compared to 2015 as expenses shifted back from in-town supply sources to the planned operation of the Green River Filtration Facility (GRFF). Although the GRFF came online in 2015, due to the statewide drought and the requirements to ensure adequate fish passage in the Green River, it was used less than expected. When compared to 2015, chemical expenses increased by \$0.6 million, solid handling costs increased by \$0.1 million and electricity increased by \$0.3 million. Also contributing nearly \$0.1 million to the increased treatment costs was the response to lead detected in our water system in April of 2016.

Expenses related to the Distribution system increased by approximately \$2.0 million (16.6%) in 2016. This is primarily due to a shift from capital work to a focus on operations and maintenance, which accounted for an additional \$0.4 million in labor and equipment charged to operating expenses rather than capital projects. Also contributing to the variance in Distribution was \$0.3 million that was spent in 2016 on condition assessment for distribution lines.

Due primarily to an increase in assessments, Administrative and General and Customer Accounting expenses experienced increases of \$1.6 million (18.3%) and \$0.5 million (11.6%) respectively.

Depreciation expense increased by \$6.7 million (39.3%) in 2016 due to a net increase in depreciable assets of \$192.3 million during 2015.

GASB 68, *Accounting and Financial Reporting for Pensions*, resulted in an increase in expense of \$1.4 million in 2016. This expense was allocated across the Water sections as follows: Source \$0.3 million, Treatment \$0.2 million, Transmission \$0.1 million, Distribution \$0.6 million, and Admin & General \$0.2 million.

In 2015, operating expenses increased \$5.0 million (8.6%), compared to an increase of \$2.7 million (4.8%) in 2014. Not only did the Green River Filtration Facility come online in 2015 but a statewide drought was declared as well. Source of Supply experienced the largest increase, \$1.7 million (26.6%). Two major projects during the drought were the purchase of water from Lakehaven, \$0.6 million, and the pumping of Eagle Lake, \$0.3 million. Source of Supply also experienced an increase in labor, approximately \$0.7 million, as labor was shifted from Transmission to Source.

Treatment saw an increase this year of \$1.1 million (28.3%) compared to 2014. Most of this increased cost of treatment can be attributed to the Green River Filtration Facility coming online. This shift in focus from capital to maintenance caused labor to increase by \$0.9 million. The drought also played a part by causing the need to purchase additional chemicals, \$0.2 million, to treat well water.

Power Pumping experienced an increase of \$0.3 million largely due to increased electricity expense due to the drought.

Administrative and General expense increased \$0.8 million (9.8%). In 2015, the department filled previously vacant positions causing a \$0.5 million increase in labor expense. Insurance expense also increased by \$0.2 million because Tacoma Water is now insuring the Plant and other facilities in the Headworks.

Due to the shift in focus from capital to maintenance, Distribution saw an increase of \$0.2 million (3.1%). However, Transmission experienced a decrease of \$0.1 million (5.2%) because labor was shifted from Transmission to Source of Supply.

Depreciation expense increased by \$0.3 million (1.9%) in 2015 due to an increase in depreciable assets of \$17.8 million during 2014.

The following table highlights Tacoma Water's operating expenses for 2016 – 2014.

Operating Expenses (In thousands)					
Category	2016	2015	2014	16/15 Increase (Decrease)	15/14 Increase (Decrease)
Production Expense					
Source of Supply	\$ 7,541	\$ 8,056	\$ 6,333	\$ (515)	\$ 1,723
Water Treatment	6,794	4,957	3,894	1,837	1,063
Total Production Expense	14,335	13,013	10,227	1,322	2,786
Power Pumping Expense	559	847	568	(288)	279
Transmission & Storage Expense	2,770	2,823	2,966	(53)	(143)
Distribution Expense	13,882	11,902	11,695	1,980	207
Customer Accounting & Service	4,830	4,327	4,435	503	(108)
Taxes	4,639	4,681	3,779	(42)	902
Depreciation	23,823	17,103	16,784	6,720	319
Administrative & General	10,518	8,892	8,102	1,626	790
Total Operating Expense	\$ 75,356	\$ 63,588	\$ 58,556	\$ 11,768	\$ 5,032

Capital Assets

Tacoma Water invests in a broad range of utility assets and at the end of 2016 had \$879.5 million in net utility plant, a decrease of \$5.2 million from 2015.

Plant in Service increased \$15.5 million compared to 2015. In 2016, 11.6 miles of water main were added or replaced. Construction was completed on 27 private contracts in 2016, resulting in 8.33 miles. The \$20.6 million increase in accumulated depreciation is due to the net increase in Plant in Service in 2015 of \$192.3 million.

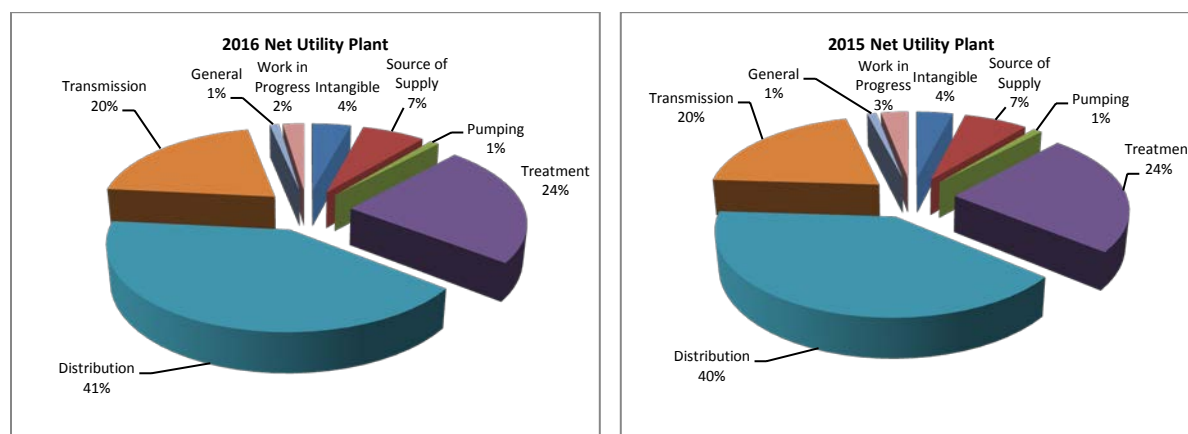
At the end of 2015 Tacoma Water had \$884.7 million in net utility plant, an increase of \$12.6 million from 2014. Plant in Service increased \$192.3 million primarily due to the completion and capitalization of the Green River Filtration Facility. The capitalization of the new facility also attributed to the decrease of \$165.7 million in construction work in progress. In 2015, 11.7 miles of water main were added; and 11.5 miles in 2014. Construction was completed on 17 private contracts in 2015, adding 5.87 miles; and 18 private contracts in 2014 added 7.55 miles.

The following table summarizes Tacoma Water's capital assets, net of accumulated depreciation, for 2016 – 2014.

Capital Assets, Net of Accumulated Depreciation (In thousands)

				16/15 Increase (Decrease)	15/14 Increase (Decrease)
Net Utility Plant	2016	2015	2014		
Intangible Plant	\$ 36,581	\$ 36,368	\$ 36,006	\$ 213	\$ 362
Source of Supply Plant	60,348	60,534	62,218	(186)	(1,684)
Pumping Plant	5,448	5,542	5,748	(94)	(206)
Water Treatment Plant	206,273	213,512	36,260	(7,239)	177,252
Transmission Plant	176,439	180,209	183,974	(3,770)	(3,765)
Distribution Plant	361,693	355,557	348,655	6,136	6,902
General Plant	12,194	12,368	12,868	(174)	(500)
Construction Work In Progress	20,572	20,631	186,354	(59)	(165,723)
Total	<u>\$ 879,548</u>	<u>\$ 884,721</u>	<u>\$ 872,083</u>	<u>\$ (5,173)</u>	<u>\$ 12,638</u>

The following graphs provide a visual presentation of the allocation of Tacoma Water's capital investments in 2016 and 2015.



Additional information on capital assets can be found in Note 4 of the financial statements.

Debt Administration

At December 31, 2016 Tacoma Water had outstanding revenue bond obligations of \$392.3 million (net of unamortized bond premiums), a decrease of \$7.6 million compared to 2015. As of year-end 2015, the Utility had outstanding revenue bond obligations of \$399.9 million (net of unamortized bond premiums); a decrease of \$7.4 million compared to 2014. Tacoma Water issued \$23.0 million of Water System Refunding Bonds in May 2015.

All outstanding bonds are rated Aa2 by Moody's Investors Service and AA by Standard & Poor's.

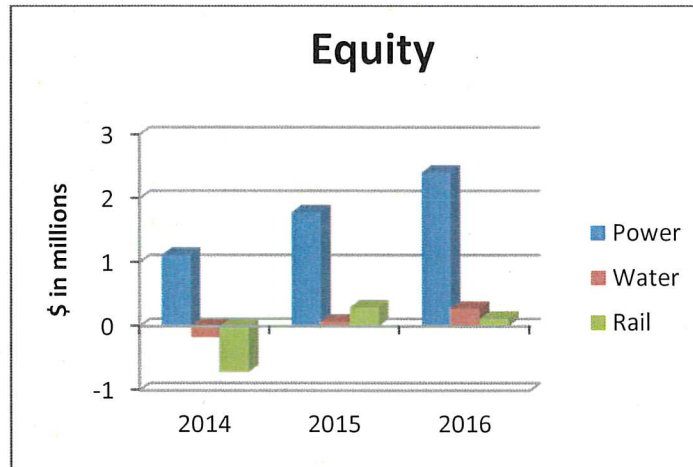
Tacoma Water is required by bond covenants to maintain a debt service coverage ratio of 1.25 for principle and interest. Debt service coverage ratios (excluding RWSS) were 2.29, 2.33, and 2.14 in 2016, 2015 and 2014 respectively.

At the end of 2016, Tacoma Water had an outstanding State loan balance of \$99.5 million compared to \$89.0 million in 2015 and \$86.7 million in 2014. During 2016, Tacoma Water received \$16.8 million in Drinking Water State Revolving Fund (DWSRF) Loans. Tacoma Water received \$0.6 million against the 2010 DWSRF Loan, \$0.6 million against the 2011 DWSRF Loan, \$1.2 million against the 2012 DWSRF Loan, \$1.2 million against the 2013 DWSRF Loan, \$1.2 million against the 2013 Fall DWSRF Loan and \$12.0 million against the 2015 DWSRF Loan. These loans were specifically for the Green River Filtration Facility.

Additional information on Tacoma Water's long-term debt can be found in Note 5 of the financial statements and in the supplementary statistical data.

Equity

The Fund's equity at the end of 2016 is \$2.8 million compared to \$2.1 million in 2015 and \$233,000 in 2014. The following graph provides a visual presentation as to how the Fund's equity is shared.



Summary

This financial report is designed to provide our citizens, taxpayers, customers, and investors and creditors with a general overview of the Self-Insurance Fund's finances and to show accountability for the money it receives. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Division Manager of Utilities Accounting, 3628 South 35th Street, Tacoma, Washington, 98409.


William A. Gaines
Director of Utilities/CEO


Andrew Cherullo
Finance Director

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CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

STATEMENTS OF NET POSITION

	DECEMBER 31,	
	2016	2015
ASSETS AND DEFERRED OUTFLOWS		
UTILITY PLANT		
In Service, at Original Cost	\$1,073,997,566	\$1,058,533,815
Less - Accumulated Depreciation	(215,021,698)	(194,443,324)
Total	858,975,868	864,090,491
Construction Work In Progress	20,571,782	20,630,616
Net Utility Plant	879,547,650	884,721,107
NON-UTILITY PROPERTY	492,963	492,963
SPECIAL FUNDS		
Construction Funds	41,717,595	33,587,187
Debt Service Funds	4,394,278	3,633,933
Bond Reserve Funds	22,030,885	22,037,730
System Development Charge Fund	58,617,922	55,889,603
Other Cash & Equity in Pooled Investments	30,066,803	28,161,316
Total Special Funds	156,827,483	143,309,769
CURRENT ASSETS		
Operating Funds Cash and Equity in		
Pooled Investments	54,768,598	49,778,192
Accounts Receivable	5,496,341	5,321,184
(Net of Allowance for Doubtful Accounts		
of \$439,846 in 2016 and \$287,805 in 2015)		
BABs Interest Subsidies Receivable	297,980	298,300
Accrued Unbilled Revenues	4,797,144	4,935,000
Materials and Supplies	2,341,548	2,487,075
Interfund Receivable	107,970	686,030
Prepayments.....	1,118,062	970,331
Total Current Assets	68,927,643	64,476,112
OTHER ASSETS		
Regulatory Asset-Public Fire Protection Fees ...	1,297,001	2,124,573
Regulatory Asset-Surcharges	1,569,477	1,683,348
Net Pension Asset	-	881,279
Total Other Assets	2,866,478	4,689,200
TOTAL ASSETS	1,108,662,217	1,097,689,151
DEFERRED OUTFLOWS OF RESOURCES		
Unamortized Losses on Refunding Bonds	1,629,071	1,910,392
Deferred Outflows for Pensions	8,994,103	2,092,307
Total Deferred Outflows of Resources	10,623,174	4,002,699
TOTAL ASSETS AND DEFERRED OUTFLOWS	<u>\$1,119,285,391</u>	<u>\$1,101,691,850</u>

The accompanying notes are an integral part of these financial statements

	DECEMBER 31,	
NET POSITION, LIABILITIES AND DEFERRED INFLOWS	2016	2015
NET POSITION		
Net Investment in Capital Assets	\$446,518,253	\$446,537,863
Restricted for:		
Water Capital and System Development Charge	43,533,806	39,439,003
Debt Service Funds	2,495,984	1,852,099
Net Pension Asset	-	881,279
Unrestricted	57,104,183	53,791,579
Total Net Position	549,652,226	542,501,823
LONG-TERM DEBT		
Revenue Bonds	386,065,146	393,841,093
Public Works Trust Fund Loans	22,708,007	25,404,777
Drinking Water State Revolving Fund Loan	69,844,046	59,154,872
Total Long-Term Debt	478,617,199	478,400,742
CURRENT LIABILITIES		
Current Maturities of Long-Term Debt	13,153,017	10,490,543
Current Maturities of Long-Term Liabilities	185,889	190,536
Accrued Taxes	1,492,476	1,863,652
Accrued Expenses and Contracts Payable	1,547,790	1,418,870
Salaries, Wages and Fringe Benefits Payable	680,647	584,328
Interest Payable	1,898,294	1,781,834
Customers' Deposits	349,725	348,793
Interfund Payables	1,678,889	1,582,992
Total Current Liabilities	20,986,727	18,261,548
LONG-TERM LIABILITIES		
Muckleshoot Agreements	6,943,806	7,129,695
Customer Advances for Construction	4,748,046	4,502,578
Unearned Revenue	7,568,812	7,905,152
Long-Term Accrued Compensated Absences	2,428,375	2,340,426
Net Pension Liability	7,788,151	-
Other Long-Term Liabilities	4,455,228	4,144,086
Total Long-Term Liabilities	33,932,418	26,021,937
TOTAL LIABILITIES	533,536,344	522,684,227
DEFERRED INFLOWS OF RESOURCES		
Rate Stabilization	35,575,447	35,575,447
Deferred Inflows for Pensions	521,374	930,353
Total Deferred Inflows of Resources	36,096,821	36,505,800
TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS	<u>\$1,119,285,391</u>	<u>\$1,101,691,850</u>

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	YEAR ENDED DECEMBER 31,	
	2016	2015
OPERATING REVENUES		
Sale of Water	\$77,980,741	\$76,959,187
Other Operating Revenues	9,997,213	9,487,934
Contract Resource Obligation Revenues	4,823,656	11,691,703
Total Operating Revenues	92,801,610	98,138,824
OPERATING EXPENSES		
Operations	17,211,669	15,571,889
Production	14,334,563	13,013,178
Administrative and General	15,348,131	13,219,166
Depreciation	23,822,527	17,102,664
Taxes	4,639,031	4,681,114
Total Operating Expenses	75,355,921	63,588,011
Net Operating Income	17,445,689	34,550,813
NON-OPERATING REVENUES (EXPENSES)		
Interest Income	1,826,299	1,112,850
Other	(221,125)	(30,042)
Interest on Long-Term Debt (Net of AFUDC)	(20,754,254)	(20,022,582)
Amortization of Premium and Loss on Refunding ..	1,269,625	1,678,959
Interest Charged to Construction	484,093	1,665,978
Total Non-Operating Expenses	(17,395,362)	(15,594,837)
Net Income Before Capital Contributions and Transfers	50,327	18,955,976
Capital Contributions		
Cash	5,707,338	6,442,694
Donated Fixed Assets	4,566,692	2,609,980
Federal BAB Subsidies	3,577,355	3,548,228
Grants	1,752	61,478
Transfers		
City of Tacoma Gross Earnings Tax	(6,753,061)	(6,778,140)
Transfer to/from Other Funds	-	(95,327)
CHANGE IN NET POSITION	7,150,403	24,744,889
NET POSITION - BEGINNING OF YEAR	542,501,823	516,673,245
ACCUMULATED ADJUSTMENT FOR CHANGE IN ACCOUNTING PRINCIPLE		1,083,689
TOTAL NET POSITION - BEGINNING OF YEAR, AS ADJUSTED		517,756,934
TOTAL NET POSITION - END OF YEAR	\$549,652,226	\$542,501,823

The accompanying notes are an integral part of these financial statements

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

STATEMENTS OF CASH FLOWS

	YEAR ENDED DECEMBER 31,	
	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash from Customers	\$93,706,684	\$97,165,918
Cash Paid to Suppliers	(18,676,633)	(20,972,089)
Cash Paid to Employees	(25,874,134)	(25,556,817)
Taxes Paid	(5,010,207)	(4,222,796)
Net Cash From		
Operating Activities	44,145,710	46,414,216
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES		
Transfer to Other Funds	-	(95,327)
Transfer Out for Gross Earnings Tax	(6,753,061)	(6,778,140)
Net Cash From Non-Capital		
Financing Activities	(6,753,061)	(6,873,467)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Capital Expenditures, net.....	(13,598,285)	(25,464,456)
Proceeds from State Drinking Water Loan	16,800,000	6,420,000
Proceeds from Sale of Bonds	-	23,010,000
Debt Issuance Costs	13,680	(986,513)
Premium on Sale of Bonds	-	2,921,513
Principal Payments on Long-Term Debt	(12,370,124)	(10,442,545)
Principal Payments on Muckleshoort LT Liability ..	(190,536)	(195,300)
Payments on Refunding of Bonds	-	(25,065,000)
Interest Paid	(20,637,794)	(20,041,363)
BABs Federal Interest Subsidies	3,577,675	3,569,992
Grants Received	1,752	61,478
Contributions in Aid of Construction	5,707,338	6,442,694
System Development Charges & Other LT Liabilities.	220,270	(380,032)
Net Cash From Capital and		
Related Financing Activities	(20,476,024)	(40,149,532)
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest Received on Investments	1,826,299	1,112,850
Other Net Non-Op Revenues and Expenses	(234,804)	375,652
Net Cash From Investing Activities	1,591,495	1,488,502
Net Change in Cash and Equity in		
Pooled Investments	18,508,120	879,719
Cash & Equity in Pooled Investments at January 1 ...	193,087,961	192,208,242
Cash & Equity in Pooled Investments at December 31 .	\$211,596,081	\$193,087,961

The accompanying notes are an integral part of these financial statements.

	YEAR ENDED DECEMBER 31,	
	2016	2015
Reconciliation of Net Operating Income to Net Cash From Operating Activities:		
Net Operating Income	\$17,445,689	\$34,550,813
Adjustments to reconcile net operating income to net cash provided by operating activities:		
Depreciation	23,822,527	17,102,664
Pension (Credits) Expense	1,358,655	(959,544)
Cash from changes in operating assets and liabilities:		
Accounts Receivable and Unbilled Revenue	(37,301)	(1,007,395)
Interfund Receivables	578,060	(393,736)
Regulatory Asset-Public Fire Protection Fees	827,572	816,101
Regulatory Asset Surcharges.....	113,871	(854,814)
Materials and Supplies	145,527	(85,552)
Prepayments	(147,731)	(263,767)
Accrued Taxes	(371,176)	458,318
Salaries, Wages and Fringe Benefits Payable	96,319	(708,707)
Long-Term Accrued Compensated Absences	87,949	39,929
Customers' Deposits	932	73,202
Accrued Expenses and Contracts Payable	128,920	(2,597,089)
Interfund Payables	95,897	243,793
Total Adjustments	26,700,021	11,863,403
Net Cash From Operating Activities	<u>\$44,145,710</u>	<u>\$46,414,216</u>
Reconciliation of Cash and Equity in Pooled Investments to Balance Sheet:		
Cash and Equity in Pooled Investments in Special Funds	\$156,827,483	\$143,309,769
Cash and Equity in Pooled Investments in Operating Funds	<u>54,768,598</u>	<u>49,778,192</u>
Cash and Equity in Pooled Investments at December 31	<u>\$211,596,081</u>	<u>\$193,087,961</u>

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**CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER**

**NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015**

NOTE 1 OPERATIONS

OPERATIONS OF TACOMA WATER – The Division, doing business as Tacoma Water, is a division of the City of Tacoma, Washington (the City), Department of Public Utilities (the Department) and is included as an enterprise fund in the Comprehensive Annual Financial Report (CAFR) of the City. The Department consists of Tacoma Power, Tacoma Water and Tacoma Rail and is governed by a five-member Public Utility Board (the Board) appointed by the City Council. Certain matters relating to utility operations such as system expansion, issuance of bonds and fixing of utility rates and charges are initiated and executed by the Board, but also require formal City Council approval.

Tacoma Water owns and operates the City's Water System which includes a surface water supply source (the Watershed); several extensive well fields; a water transmission system consisting of several pipelines, water treatment and quality facilities; various reservoirs, standpipes and pump stations; and an extensive distribution system. Tacoma Water supplies water to approximately 100,731 customers and had 242 employees as of December 31, 2016. Tacoma Water's service area includes the City of Tacoma and urbanized areas of Pierce and South King Counties. Water service outside the City limits is provided under franchises granted by both Pierce and King Counties and multiple other cities. Tacoma Water is organized functionally as Water Distribution Engineering, Water Distribution Operations, Water Quality, Water Supply, Asset and Information Management, and Water Rates and Financial Planning.

WATER DISTRIBUTION ENGINEERING – To plan, forecast and model distribution system expansion and renewal and replacements; engineer, design, and oversee construction of mains, hydrants, services, meters, pressure reducing valves and pressure zones; provide excellent customer service and key account management; support growth and development through coordination, permitting and contracting; promote water conservation through outreach and customer programs.

WATER DISTRIBUTION OPERATIONS – To effectively operate and maintain the various components of the distribution system including mains, hydrants, valves, services and meters; to respond to and repair main breaks and leaks; to install new services and hydrants as need for development; to manage the warehouse and materials purchasing; to provide customer service for outages and all other water service issues; to oversee and manage the apprenticeship program; and to provide effective leadership for Tacoma Water's safety program.

WATER QUALITY – To manage, operate and maintain the Green River Headworks and Watershed; to assure natural resource management of Water utility lands including the Watershed; to provide for fish and wildlife habitat management; to install, operate and maintain water treatment equipment within the system; to respond to all matters relating to water quality from the source to the customer; to monitor for contaminants and assure regulatory compliance; to participate in shaping water quality legislation and regulations; to be aware of changes in water system security needs and to coordinate as needed; to support wholesale water customers.

WATER SUPPLY – Designs, constructs, operates and maintains the following of the City's water supply structures: transmission mains and appurtenances, rights-of-ways, wells, pump stations and other mechanical/electrical equipment, storage tanks and reservoirs, pressure reducing stations, many Tacoma Water buildings and properties, communication and telemetry systems (including the Water Control Center), corrosion control facilities, and administers water rights and tracks water system security issues, while overseeing and managing Tacoma Water's emergency preparedness and coordinating with outside agencies.

WATER ASSET AND INFORMATION MANAGEMENT – Prepares system and strategic plans, supports Tacoma Water's Geographic Information System and Hydraulic Model operating technologies, promotes use and maturity of TPU information technologies, and oversees asset management implementation which incorporates risk, levels of service, and lifecycle costs into the Tacoma Water decision making process.

WATER RATES AND FINANCIAL PLANNING – Is responsible for the utility's long range financial plan, rates and charges, budget development and monitoring, and rate and financial policies. This group provides financial, supply and demand, and customer analytics and reports to support decision-making by executive management, policymakers and the RWSS Partners. This group develops and administers special retail and wholesale water supply agreements in pursuit of the utility's strategic objectives, and is responsible for leading new performance management, risk management, and advanced metering objectives through cross-functional engagement with the utility and TPU.

REGIONAL WATER SUPPLY SYSTEM – The Regional Water Supply System (RWSS) is a partnership formed by Tacoma, the City of Kent, Covington Water District and Lakehaven Utility District (the "Participants") to permit, design, finance, construct, operate, maintain and receive delivery of water from the Second Supply Project. The Second Supply Project consists of the following components: (i) water from the exercise of Tacoma Water's Second Diversion Water Right, (ii) the Second Supply Pipeline, (iii) improvements made at the Headworks diversion dam and intake, (iv) Second Supply Project fisheries and environmental enhancements, (v) the right to store water as a result of the Howard Hanson Dam Additional Storage Project, and (vi) associated Treatment Facilities. Participants' rights and obligations with regard to the Second Supply Project are called out in the Second Supply Project Agreement. Tacoma has a 15/36 Participant Share and each of the others have a 7/36 Participant Share. A Participant Share represents a Participant's proportional right to receive water delivered by the Second Supply Project and represents a Participant's obligation to pay project costs, including Fixed and Variable Operation & Maintenance Costs, Initial Project Construction Costs and ongoing Capital Expenditures. Tacoma, consistent with the Project Agreement, is the owner and operator of the Second Supply Project.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING AND PRESENTATION – The financial statements of the Division are prepared under the accrual basis of accounting in accordance with GAAP issued by the Governmental Accounting Standards Board (GASB) applicable to governmental entities that use proprietary fund accounting. The financial statements use a flow of economic resources measurement focus to determine financial position and the change in financial position. The accounting principles used are similar to those applicable to business in the private sector and are maintained on the accrual basis of accounting. Revenues are recognized when earned, and costs and expenses are recognized when incurred.

The Division follows the provisions set forth in regulatory accounting guidance. In general, regulatory accounting permits an entity with cost-based rates to defer certain costs or income that would otherwise be recognized when incurred to the extent that the rate-regulated entity is recovering or expects to recover such amounts in rates charged to its customers.

The Division generally follows the uniform system of accounts prescribed by the National Association of Regulatory Utility Commissioners and the Division of Audits of the State Auditor's Office.

CASH AND EQUITY IN POOLED INVESTMENTS – The Division's fund cash balances are a "deposit" with the City Treasurer's Tacoma Investment Pool (TIP) for the purpose of maximizing interest earnings through pooled investment activities. Cash and equity in pooled investments in the TIP are reported at fair value and changes in unrealized gains and losses are recorded in the Statements of Revenues, Expenses and Changes in Net Position. Interest earned on such pooled investments is allocated daily to the participating funds based on each fund's daily equity in the TIP.

The TIP operates like a demand deposit account in that all City departments, including the Division, have fund balances which are their equity in the TIP. Accordingly, balances are considered to be cash equivalents.

The City of Tacoma Investment Policy permits legal investments as authorized by state law including Certificates of Deposit with qualified public depositories (as defined in Chapter 39.58 of the Revised Code of Washington (RCW)), obligations of the U.S. Treasury, Government Sponsored Agencies and Instrumentalities, bonds issued by Washington State and its Local Governments with an A or better rating, general obligation bonds issue by any State or Local Government with an A or better rating, Bankers' Acceptances, Commercial Paper, Repurchase and Reverse Repurchase agreements, and the Washington State Local Government Investment Pool (LGIP). Daily liquidity requirement to meet the City's daily obligations is maintained by investing a portion of the City's Investment Pool in the LGIP and in certificates of deposit with East West Bank and Opus Bank.

The Division's equity in that portion of the City of Tacoma Investment Pool held in qualified public depositories at December 31, 2016 and 2015 is entirely covered by the Federal Deposit Insurance Corporation (FDIC) and the Washington State Public Deposit Protection Commission (WSPDPC).

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, longer term investments have greater exposure to changes in market interest rates. The City of Tacoma investment policy allows for authorized investments up to 60 months to maturity. One way the City manages its exposure to interest rate risk is by timing cash flows from maturities so that portions of the portfolio are maturing over time to provide cash flow and liquidity needed for operations.

Credit risk is generally the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Repurchase agreements and commercial paper are protected by the Federal Deposit Insurance Corporation (FDIC) insurance up to \$250,000. All deposits not covered by the FDIC are covered by the WSPDPC. The WSPDPC is a statutory authority established under RCW 39.58. It constitutes a fully insured or fully collateralized pool. The WA State Treasures LGIP is authorized by RCW 43.250. The LGIP is operated like a 2A7 fund and is collateralized by short-term legal investments.

ACCOUNTS RECEIVABLE AND ACCRUED UNBILLED REVENUES – Accounts receivable consist of amounts owed by private individuals and organizations for goods delivered or services rendered in the regular course of business operations. Receivables are shown net of allowances for doubtful accounts. The Division accrues an estimated amount for services that have been provided but not billed as of December 31st.

ALLOWANCE FOR DOUBTFUL ACCOUNTS – A reserve has been established for uncollectible accounts receivable based on historical write-off trends and knowledge of specific circumstances that indicate collection of an account may be unlikely. Generally accounts receivable are considered past due after 30 days.

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

INTERFUND TRANSACTIONS – Unsettled transactions between City funds at year end are recorded as due to or due from other funds.

MATERIALS AND SUPPLIES INVENTORY – Materials and supplies consist primarily of items for maintenance of Division assets and are valued at the lower of average cost or fair market value.

RESTRICTED ASSETS – In accordance with bond resolutions, agreements and laws, separate restricted funds have been established. These funds consist of cash and investments in pooled investments with restrictions externally imposed and legally enforceable, established by the City Council. Generally, restricted assets include bond construction, reserve and debt service funds, system development charges funds, notes and contracts receivable, and customer deposits.

BOND PREMIUM AND LOSS ON REFUNDING – Bond premiums are amortized over the life of the bonds using the weighted average of the bonds outstanding. Losses on refunding are amortized on a straight-line basis over the applicable bond period.

RATE STABILIZATION – The Division has established a rate stabilization account to reduce significant year-to-year variations in rates. Amounts deposited into the account are excluded from the statement of revenues, expenses and changes in net position in accordance with regulated operations. Revenue will be recognized in subsequent periods when it is withdrawn in accordance with rate decisions and debt service covenants.

UTILITY PLANT AND DEPRECIATION – Utility plant is stated at original cost, which includes both direct costs of construction or acquisition and indirect costs. The cost of maintenance and repairs is charged to expense as incurred, while the cost of replacements and betterments is capitalized. Assets are capitalized when costs exceed \$5,000 and the useful life exceeds one year.

Depreciation is recorded using a straight-line composite method based on National Association of Regulatory Utility Commissioners (NARUC) recommended economic asset lives from 13 to 60 years for related operating assets placed in service at the beginning of the year. The original cost of property together with removal cost, less salvage, is charged to accumulated depreciation at such time as property is retired and removed from service.

The economic lives for plant in service are as follows:

Source of Supply Plant	34 years
Pumping Plant	40 years
Water Treatment Plant	28 years
Transmission Plant	60 years
Distribution Plant	53 years
General Plant	13 years

CONSTRUCTION WORK IN PROGRESS – Capitalizable costs incurred on projects which are not in service or ready for use are held in construction in progress. When the asset is ready for service, related costs are transferred to capital assets. Upon determining that a project will be abandoned, the related costs are charged to expense.

ASSET VALUATION – The Division periodically reviews the carrying amount of its long-lived assets for impairment. An asset is considered impaired when estimated future cash flows are less than the carrying amount of the asset. In the event the carrying amount of such asset is not deemed recoverable, the asset is adjusted to its estimated fair value. Fair value is generally determined based on discounted future cash flows.

ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC) – AFUDC represents the cost of borrowed funds used for the construction of utility plant, net of interest earned on unspent construction funds. Capitalized AFUDC is shown as part of the cost of utility plant and as a reduction of interest income and expense.

CONTRIBUTIONS IN AID OF CONSTRUCTION AND SYSTEM DEVELOPMENT CHARGES – GASB Statement No. 33, which addresses accounting for contributed capital, requires that contributed capital be recognized as change in net position. Capital contributions include new service connections and system development charges. System development charges are collected on all new services prior to installation to ensure required new source, transmission and storage facilities needed to meet new demands are funded. The charge was developed using a cost-of-service approach and includes a share of historical plant investment and projected future outlays that will increase system capacity. Because the funds collected for this charge can only be used for system expansion projects, the balance is reflected as restricted in the Division's net position. System development charges on uncompleted projects are recorded in other long term liabilities.

REGULATORY ASSETS – The Division has deferred Public Fire Protection Fees, Hyada Surcharges and Andrain Surcharges to future periods matching the time when the revenues and expenses are included in rates. The deferred balance is reduced as fees and surcharges are recovered and amortized as expenses on the statements of revenues, expenses and changes in net position.

INTANGIBLE ASSETS – In accordance with GASB No. 51, "Accounting and Financial Reporting for Intangible Assets", land use rights such as easements and right-of-ways are recorded as intangible assets.

COMPENSATED ABSENCES – The City has two different policies for compensated absences. The City's original policy allows employees to accrue vacation based on the number of years worked with a maximum accrual equal to the amount earned in a two-year period. These employees also accrue one day of sick leave per month without any ceiling on the maximum accrued. The City implemented a new policy in 1998 allowing employees to earn PTO (personal time off) without distinction between vacation and sick leave. Employees who worked for the City prior to the change could choose to stay with the original policy or opt to convert to the new policy. The amount of PTO earned is based on years of service. The maximum accrual for PTO is 960 hours, and upon termination, employees are entitled to compensation for unused PTO at 100%. Vacation pay and PTO are recorded as a liability and expense in the year earned.

Employees in the original policy accumulate sick leave at the rate of one day per month with no maximum accumulation specified. Employees receive 25% of the value at retirement or 10% upon termination for any other reason. In the event of death, beneficiaries receive 25% of the value. Sick leave pay is recorded as a liability and an expense in the year earned.

The accrued liability is computed at 100% vacation and PTO while sick leave is accrued at 10%, which is considered the amount vested or 25% if the employee meets retirement criteria. Based on historical information, 10% of compensated absences are considered short term.

OPERATING REVENUE – Service rates are authorized by the Tacoma City Council. Revenues are recognized as earned and include an estimate of revenue earned but not billed to customers as of year-end. Utility revenues are derived primarily from the sale and transmission of water. Utility revenue from water sales is recognized when the water is delivered to and received by the customer.

Tacoma Water receives contract resource obligation revenue and debt service payments from our partners in the Second Supply Project Agreement which are recorded as operating revenue.

NON-OPERATING REVENUES AND EXPENSES – These are items that do not qualify as operating defined above such as interest and gain (loss) on disposition of property.

TAXES – The City charges the Division a Gross Earnings Tax at the rate of 8.0%. In addition, the Division pays a 5.029% public utility tax to the State on a certain portion of revenues identified as utility revenues. The Division also pays business and occupation tax to the State at the rate of 1.8% on certain other non-utility revenues. The Division is exempt from payment of federal income tax.

NET POSITION – The Statement of Net Position reports all financial and capital resources. The difference between assets and liabilities is net position. There are three components of net position: net investment in capital assets, restricted or unrestricted.

Net investment in capital assets consists of capital assets, less accumulated depreciation, reduced by the outstanding balances of any bonds, loans or other borrowings, less outstanding construction funds that are attributable to the acquisition, construction, or improvements of those assets.

Net position components are restricted when constraints placed on net position use are either (1) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or (2) imposed by law through constitutional provisions or enabling legislation.

Unrestricted net position components are those that are not “net investment in capital assets” or “restricted” so that it can be used for daily operation of the Water Utility.

ARBITRAGE REBATE REQUIREMENT – The Division is subject to the Internal Revenue Code (“IRC”), Section 148(f), related to its tax-exempt revenue bonds. The IRC requires that earnings on gross proceeds of any revenue bonds that are in excess of the amount prescribed will be surrendered to the Internal Revenue Service. As such, the fund would record such a rebate as a liability. The Division had no liability in the current or prior year.

SHARED SERVICES – The Division receives certain services from other departments and agencies of the City, including those normally considered to be general and administrative. The Division is charged for services received from other City departments and agencies.

USE OF ESTIMATES – The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. The Division used estimates in determining reported unbilled revenues, allowance for doubtful accounts, accrued compensated absences, depreciation, Other Post Employment Benefit (OPEB), pension, self-insurance liabilities and other contingencies. Actual results may differ from these estimates.

SIGNIFICANT RISKS AND UNCERTAINTIES – The Division is subject to certain business risks that could have a material impact on future operations and financial performance. These risks include, but are not limited to, water conditions, weather and natural disaster-related disruptions, collective bargaining labor disputes, fish and other endangered species act issues, Environmental Protection Agency regulations and federal government regulations.

RECLASSIFICATIONS – Changes have been made to the prior year account classifications as needed to conform to the current year presentation format.

NOTE 3 INVESTMENTS MEASURED AT FAIR VALUE - The City measures and records its investments within the fair value hierarchy established by generally accepted accounting principles.

The hierarchy is based on the valuation inputs used to measure the fair value of the asset, where fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1 – Level 1 inputs are quoted (unadjusted) prices in active markets for identical assets or liabilities that the government can access at the measurement date. Observable markets include exchange markets, dealer markets, brokered markets and principal-to-principal markets.
- Level 2 – Level 2 inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These inputs are sourced from pricing vendors using models that are market-based and corroborated by observable market data including: quoted prices; nominal yield spreads; benchmark yield curves; and other corroborated inputs.
- Level 3– Level 3 inputs are unobservable inputs for the asset or liability and should only be used when relevant Level 1 or Level 2 inputs are unavailable.

The fair value evaluations are provided by Interactive Data. Interactive Data utilizes evaluated pricing models that vary by asset class and incorporate available trade, bid and other market information and for structured securities, cash flow and, when available, loan performance data. Because many fixed income securities do not trade on a daily basis, Interactive Data's evaluated pricing applications apply available information as applicable through processes such as benchmark curves, benchmarking of like securities, sector groupings, and matrix pricing, to prepare evaluations. In addition, Interactive Data uses model processes, such as the Option Adjusted Spread model to assess interest rate impact and development payment scenarios. Their models and processes take into account market convention. For each asset class, a team of evaluators gathers information from market sources and integrates relevant credit information, perceived market movements and sector news into the evaluated pricing applications and models.

Source: Interactive Data "Summary of Inputs by Asset Class Fixed Income Evaluations, Fair Value Information Service and Valuations of Certain Other Instruments" dated January 2016.

Cash and cash equivalents include highly liquid investments including short-term investment funds. Cash and cash equivalents are valued at cost and, therefore, excluded from the fair value schedule.

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

Data regarding the City's investments, valued and categorized according to the above outlined levels, is below:

	As of 12/31/2016	Level 1	Level 2	Level 3
Debt Securities				
U.S. Treasury Securities	\$ 146,824,628	\$ -	\$ 146,824,628	\$ -
U.S. Agency Securities	544,579,831	-	544,579,831	-
Municipal Bonds	61,450,051	-	61,450,051	-
Total	<u>\$ 752,854,510</u>	<u>\$ -</u>	<u>\$ 752,854,510</u>	<u>\$ -</u>

	As of 12/31/2015	Level 1	Level 2	Level 3
Debt Securities				
U.S. Treasury Securities	\$ 108,647,159	\$ -	\$ 108,647,159	\$ -
U.S. Agency Securities	541,730,184	-	541,730,184	-
Municipal Bonds	119,200,942	-	119,200,942	-
Total	<u>\$ 769,578,285</u>	<u>\$ -</u>	<u>\$ 769,578,285</u>	<u>\$ -</u>

Tacoma Water's share of the City Investments shown in the table above is 24.45% and 23.98% for 2016 and 2015.

NOTE 4 UTILITY PLANT – A summary of the balances and changes in utility plant for 2016 and 2015 follows:

	Balance December 31, 2015	Additions	Retirements	Transfers & Adjustments	Balance December 31, 2016
Intangible Plant	\$ 36,367,666	\$ 783,399	\$ (569,580)	\$ -	\$ 36,581,485
Source of Supply Plant	83,671,496	1,813,377	-	-	85,484,873
Pumping Plant	9,400,042	143,831	-	-	9,543,873
Water Treatment Plant	229,764,871	1,056,127	-	-	230,820,998
Transmission Facilities	230,986,906	2,766	-	-	230,989,672
Distribution Facilities	433,734,385	13,210,948	(2,150,707)	-	444,794,626
General Plant	34,608,449	1,189,967	(16,377)	-	35,782,039
Total water Plant in Service	1,058,533,815	18,200,415	(2,736,664)	-	1,073,997,566
Less Accumulated Depreciation	194,443,324	23,822,527	(2,167,084)	(1,077,069)	215,021,698
	<u>864,090,491</u>	<u>(5,622,112)</u>	<u>(569,580)</u>	<u>1,077,069</u>	<u>858,975,868</u>
Construction Work in Progress	20,630,616	18,141,410	-	(18,200,244)	20,571,782
Net Utility Plant	<u>\$ 884,721,107</u>	<u>\$ 12,519,298</u>	<u>\$ (569,580)</u>	<u>\$ (17,123,175)</u>	<u>\$ 879,547,650</u>

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

	Balance December 31, 2014	Additions	Retirements	Transfers & Adjustments	Balance December 31, 2015
Intangible Plant	\$ 36,006,378	\$ 556,588	\$ (195,300)	\$ -	\$ 36,367,666
Source of Supply Plant	83,383,567	287,929	-	-	83,671,496
Pumping Plant	9,388,535	32,123	(20,616)	-	9,400,042
Water Treatment Plant	50,736,258	179,028,769	(156)	-	229,764,871
Transmission Facilities	230,964,809	22,097	-	-	230,986,906
Distribution Facilities	422,055,694	13,647,713	(1,969,022)	-	433,734,385
General Plant	33,744,366	1,106,582	(29,300)	(213,199)	34,608,449
Total water Plant in Service	866,279,607	194,681,801	(2,214,394)	(213,199)	1,058,533,815
Less Accumulated Depreciation	180,549,889	17,102,664	(2,019,094)	(1,190,135)	194,443,324
	685,729,718	177,579,137	(195,300)	976,936	864,090,491
Construction Work in Progress	186,353,639	28,745,579	-	(194,468,602)	20,630,616
Net Utility Plant	\$ 872,083,357	\$ 206,324,716	\$ (195,300)	\$ (193,491,666)	\$ 884,721,107

Total Water Plant in Service includes non-depreciable assets of \$59,139,334 for 2016 and \$58,314,508 for 2015. The total amount of interest incurred and capitalized is \$484,093 for 2016 and \$1,665,979 for 2015.

NOTE 5 LONG-TERM DEBT – The Division's Long-term Liabilities are primarily for the purpose of capital improvements. Long-term debt activities for 2016 and 2015 were as follows:

	Balance December 31, 2015	Additions	Reductions	Balance December 31, 2016	Due Within One Year
Revenue Bonds	\$ 384,705,000	\$ -	\$ (6,080,000)	\$ 378,625,000	\$ 6,225,000
Plus: Unamortized Premium	15,216,093	-	(1,550,947)	13,665,146	
Net Revenue Bonds	399,921,093	-	(7,630,947)	392,290,146	6,225,000
Public Works Trust Fund Loans	28,101,548	-	(2,696,771)	25,404,777	2,696,771
Drinking Water State Revolving Fund Loans	60,868,644	16,800,000	(3,593,351)	74,075,293	4,231,246
Total Long-Term Debt	\$ 488,891,285	\$ 16,800,000	\$ (13,921,069)	\$ 491,770,216	\$ 13,153,017

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

	Balance December 31, 2014	Additions	Reductions	Balance December 31, 2015	Due Within One Year
Revenue Bonds	\$ 393,065,000	\$ 23,010,000	\$ (31,370,000)	\$ 384,705,000	\$ 6,080,000
Plus: Unamortized Premium	14,231,813	2,921,513	(1,937,233)	15,216,093	
Net Revenue Bonds	407,296,813	25,931,513	(33,307,233)	399,921,093	6,080,000
Public Works Trust Fund Loans	30,798,319	-	(2,696,771)	28,101,548	2,696,771
Drinking Water State Revolving Fund Loans	55,889,417	6,420,000	(1,440,773)	60,868,644	1,713,772
Total Long-Term Debt	<u>\$ 493,984,549</u>	<u>\$ 32,351,513</u>	<u>\$ (37,444,777)</u>	<u>\$ 488,891,285</u>	<u>\$ 10,490,543</u>

Tacoma Water's long-term debt at December 31 consists of the following payable from revenues of Tacoma Water:

SENIOR LIEN BONDS

	2016	2015
2005 Water System Revenue and Refunding Bonds, with interest rate of 5.0%, due in 2025. Original Issue: \$46,550,000 Current Portion: \$0	\$ 5,000	\$ 5,000
2009 Water System Revenue Bonds, with interest rate at 5.751%, with Build America Bond (BAB) rebate ranging from 32.45% to 32.62%, due in yearly installments starting in 2033 ranging from \$9,800,000 to \$12,210,000 through 2039. Original Issue: \$76,775,000 Current Portion: \$0	76,775,000	76,775,000
2010A Water System Revenue Refunding Bonds, with interest rates ranging from 3.0% to 5.0%, due in yearly installments ranging from \$570,000 to \$4,655,000 through 2023. Original Issue: \$29,100,000 Current Portion: \$570,000	26,395,000	26,950,000

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

SENIOR LIEN BONDS CONTINUED

	2016	2015
2010B Water System Revenue Bonds, with interest rates ranging from 4.581% to 5.621%, with Build America Bond (BAB) Rebate ranging from 32.45% to 32.62% of interest, due in yearly installments starting in 2024 ranging from \$2,115,000 to \$15,390,000 through 2040.		
Original Issue: \$74,985,000	74,985,000	74,985,000
Current Portion: \$0		
2010A Regional Water Supply System Revenue Bonds, with interest rates ranging from 3.0% to 4.0%, due in yearly installments starting ranging from \$280,000 to \$355,000 through 2024. (See Note 6)		
Original Issue: \$3,595,000	2,525,000	2,800,000
Current Portion: \$280,000		
2010B Regional Water Supply System Revenue Bonds, with interest rates ranging from 5.371% to 5.621%, with Build America Bond (BAB) rebate ranging from 32.45% to 32.62% of interest, due in yearly installments starting in 2025 ranging from \$370,000 to \$5,775,000 through 2040. (See Note 6)		
Original Issue: \$44,245,000	44,245,000	44,245,000
Current Portion: \$0		
2013 Water System Revenue and Refunding Bonds, with interest rates ranging from 2.0% to 4.0%, due in installments of \$980,000 in 2014 and yearly installments starting in 2041 ranging from \$23,820,000 to \$25,765,000 through 2043.		
Original Issue: \$78,305,000	74,355,000	74,355,000
Current Portion: \$0		
2013 Regional Water Supply System Revenue and Refunding Bonds, with interest rates ranging from 4.0% to 5.0%, due in yearly installments ranging from \$745,000 to \$6,425,000 through 2032.		
Original Issue: \$64,795,000	60,910,000	61,580,000
Current Portion: \$745,000		

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

SENIOR LIEN BONDS CONTINUED

	2016	2015
2015A Water System Refunding Bonds with interest rates ranging from 4.0% to 5.0%, due in yearly installments starting in 2017 ranging from \$1,460,000 to \$2,845,000 through 2025.		
Original Issue: \$16,645,000	16,645,000	16,645,000
Current Portion: \$2,845,000		
2015B Water System Refunding Bonds with interest rate of 1.15%, final installment due in the amount of \$1,785,000 in 2017.		
Original Issue: \$6,365,000	1,785,000	6,365,000
Current Portion: \$1,785,000		
Subtotal Sr. Lien Debt	\$ 378,625,000	\$ 384,705,000
Unamortized Premium	13,665,146	15,216,093
Less Current Portion of Revenue Bond Debt	(6,225,000)	(6,080,000)
Long-term Portion of Revenue Bond Debt	<u>\$ 386,065,146</u>	<u>\$ 393,841,093</u>

Scheduled principal maturities on the bonds and interest payments are as follows:

Year	Principal	Interest
2017	\$ 6,225,000	\$ 18,887,997
2018	6,450,000	18,690,919
2019	7,610,000	18,428,169
2020	7,950,000	18,094,669
2021	8,355,000	17,703,369
2022-2026	46,655,000	82,269,708
2027-2031	58,715,000	69,381,686
2032-2036	82,085,000	52,278,699
2037-2041	104,045,000	26,442,615
2042-2043	50,535,000	3,052,000
	<u>\$ 378,625,000</u>	<u>\$ 325,229,831</u>

Tacoma Water's revenue bonds are secured by the net revenue of Tacoma Water and all cash and investments held in the bond funds and construction funds. The bonds are also subject to certain financial and non-financial covenants. The Division was in compliance with all debt covenants at December 31, 2016.

The carrying amounts of the Washington State Public Works Board Loans and Drinking Water State Revolving Fund Loans approximate the fair value since such loans are exclusive and have no market.

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

JUNIOR LIEN DEBT

	<u>2016</u>	<u>2015</u>
Public Works Trust Fund Loans		
2001 Public Works Trust Fund pre-construction loan for the Second Supply Project (SSP) Howard Hanson Dam Additional Storage Project, with interest of .5% per annum, due in yearly installments of \$52,631 through 2021.	\$ 263,158	\$ 315,789
2001 Public Works Trust Fund construction loan for the SSP, with interest of .5% per annum, due in yearly installments of \$533,333 through 2021.	2,666,667	3,200,000
2002 Public Works Trust Fund pre-construction loan for Middle and Headworks section of the SSP, with interest of .5% per annum, due in yearly installments of \$54,179 through 2021.	270,898	325,077
2002 Public Works Trust Fund construction loan for the Middle and Headworks section of the SSP, with interest of .5% per annum, due in yearly installments of \$531,250 through 2022.	3,187,500	3,718,750
2004 Public Works Trust Fund pre-construction loan for the design of the Green River Ozone Facility with interest of .5% per annum, due in yearly installments of \$53,362 through 2024.	426,901	480,263
2006 Public Works Trust Fund construction loan for the Green River Ozone Treatment Plant, with interest of .5% per annum, due in yearly installments of \$370,589 through 2026.	3,705,882	4,076,471
2008 Public Works Trust Fund construction loan for the McMillin Reservoir Reconstruction, with interest of .5% per annum, due in yearly installments of \$545,869 through 2028.	6,550,439	7,096,308
2012 Public Works Trust Fund construction loan for the Green River Filtration Facility, with interest of .5% per annum, due in yearly installments of \$555,556 through 2031.	8,333,333	8,888,889

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

JUNIOR LIEN DEBT CONTINUED

	2016	2015
Drinking Water State Revolving Fund Loans		
2002 construction loan for the Portland Avenue Reservoir, with interest of 2.5% per annum, due in yearly installments of \$161,053 through 2021.	805,263	966,316
2008 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.5% per annum, due in yearly installments of \$215,109 through 2028.	2,581,300	2,796,409
2009 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.0% per annum, due in yearly installments of \$367,088 through 2032.	5,873,406	6,240,494
2010 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.5% per annum, due in yearly installments of \$303,000 through 2032.	4,848,000	5,151,000
2010 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$304,579 through 2034.	5,482,421	5,187,000
2011 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.5% per annum, due in yearly installments of \$121,524 through 2033.	2,065,902	2,187,426
2011 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$303,000 through 2035.	5,757,000	5,460,000
2012 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$606,000 through 2035.	11,514,000	10,920,000
2013 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$606,000 through 2035.	11,514,000	10,920,000

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

JUNIOR LIEN DEBT CONTINUED

	2016	2015
2013F construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$606,000 through 2035.	11,514,000	10,920,000
2015 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$637,895 through 2035.	12,120,000	120,000
Subtotal Junior Lien Debt	99,480,070	88,970,192
Less Current Portion of Debt	(6,928,017)	(4,410,543)
Long-term Portion of Junior Lien Debt	<u>\$ 92,552,053</u>	<u>\$ 84,559,649</u>

Scheduled principal maturities of junior lien debt and interest payments are as follows:

Year	Principal	Interest
2017	\$ 6,928,017	\$ 1,156,239
2018	6,928,017	1,082,701
2019	6,928,017	1,009,162
2020	6,928,017	935,624
2021	6,928,017	862,087
2022-2026	28,402,373	3,295,833
2027-2031	23,575,161	1,743,272
2032-2035	12,862,451	423,036
	<u>\$ 99,480,070</u>	<u>\$ 10,507,954</u>

NOTE 6 SECOND SUPPLY PROJECT AGREEMENT – Four Washington municipalities are the Participants in the Second Supply Project under the terms of the Second Supply Project Agreement, which defines their rights and obligations with regard to the Second Supply Project. Tacoma Water has a 15/36 Participant Share and each of the City of Kent, Covington Water District and Lakehaven Utility District has a 7/36 Participant Share in the Second Supply Project. Each Participant has contractual rights under the Second Supply Project Agreement (i) to use an undivided share of the Project equal to its project capacity share and to use available excess project capacity; (ii) to schedule for delivery and receive its Participant Share of Second Diversion Water at its points of delivery; (iii) to schedule for delivery and receive additional water at its points of delivery; and (iv) to its Participant Share of storage. Each Participant has a contractual obligation (i) to receive Second Diversion Water and additional water scheduled for delivery and delivered to it and (ii) to pay its Participant Share of Project Costs, including but not limited to Fixed and Variable O & M Costs, Initial Project Construction Costs and Capital Expenditures. Kent and Covington, in the “Repayment Agreement”, pledge to pay Tacoma Water a defined share of the principal and interest debt service on the Regional Water Supply System Bonds. The term of the Second Supply Project Agreement extends through the operating life of the Second Supply Project including all renewals and replacements thereof and additions thereto. The Second Supply Project Agreement provides that all obligations incurred during its term will survive its termination or expiration and will survive until satisfied.

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

NOTE 7 SIGNIFICANT CUSTOMER – Contracted sales to WestRock CP LLC accounted for 7.5% and 7.7% of Tacoma Water's total water sales in 2016 and 2015, respectively. There were no outstanding accounts receivables from WestRock at year-end 2016 or 2015.

Tacoma Water has contracted with WestRock to supply certain quantities of water at a specified rate through July 31, 2020.

NOTE 8 FLEET SERVICES FUND – Tacoma Water pays the Fleet Services Fund for the use of the vehicles and equipment to cover fleet operating expenses. Payments made by Tacoma Water in 2016 and 2015 were \$2,148,122 and \$2,305,433, respectively.

Fleet Services' management makes an annual assessment of the capital replacement reserve balance for appropriate funding levels. It is the Fund's policy to maintain the Fund's maximum balance at a level that will provide adequate purchasing power for a three-year cycle. The solvency of the Replacement Fund allowed Fleet Services to return a portion of interest earned on Fund investments for the year to their customers. In 2016 and 2015, Fleet Services returned 75% of the interest earned on the capital replacement reserve to Tacoma Water's replacement fund. The amounts refunded in 2016 and 2015 were \$35,278 and \$36,966, respectively, which was used to offset the corresponding year's fleet expenses.

NOTE 9 SELF-INSURANCE FUND – The Department of Public Utilities maintains a self-insurance program and insurance policies. The Department has established a self-insurance fund to insure Tacoma Water and other divisions within the Department for certain losses arising from personal and property damage claims by third parties. The major risks to Tacoma Water are flooding, wind damage, chemical spills and earthquakes. Mitigating controls and emergency and business resumption plans are in place. To the extent damage or claims exceed insured values, rates may be impacted.

Tacoma Water is required to make payments to the Self-Insurance Fund to cover claims incurred by Tacoma Water and administrative expenses of the Fund. Tacoma Water's premium payments were \$240,000 in 2016 and 2015. Assets in the Self-Insurance Fund total \$7.6 million which exceeds accrued and incurred but not reported liabilities. Equity in the Self-Insurance Fund is transferred to the appropriate operating divisions in accordance with GASB 10. Management believes Tacoma Water's investment in the Self-Insurance Fund is more than adequate to settle all its known or estimated claims.

The City purchased a \$15 million Fiduciary Liability Policy with a \$100,000 deductible that provides for wrongful acts arising out of the administration of the City's employee benefit programs and a Crime policy with a \$1 million limit and \$75,000 deductible for employee dishonesty and for fraudulent or dishonest act by employees against the City for loss of money, securities and property.

The insurance policies presently in effect include coverage on the Department's buildings and fleet vehicles as well as general liability and public official's liability. The current insurance policies have deductibles or self-insured retentions of \$250,000 for buildings and property within buildings and \$10,000 per vehicle. There is a self-insured retention of \$1.5 million for general liability. The public official liability policy has a \$200,000 deductible. The Department's total liability limit is \$60 million any one occurrence and \$60 million annual aggregate. The general government general liability and public official liability policies provide \$20 million of excess coverage with \$3 million retention. The City has a policy to cover extraordinary worker's compensation claims with a statutory limit and a self-insured retention of \$1 million per occurrence and an additional \$250,000 for each 12 month policy period.

NOTE 10 TACOMA EMPLOYEES' RETIREMENT SYSTEM FUND (TERS) – The Tacoma Employees' Retirement System (TERS or System), a pension trust fund of the City of Tacoma, issues a publicly available CAFR that includes financial statements and required supplementary information may be obtained by writing to:

Tacoma Employee's Retirement System
3628 South 35th Street
Tacoma, WA 98409

Or the TERS CAFR may be downloaded from the TERS website at www.cityoftacoma.org/retirement.

Administration of The System – The "Tacoma Employees' Retirement System" is a cost-sharing, multiple-employer, defined benefit retirement plan covering substantially all employees of the City of Tacoma, with the exception of police officers, firefighters, and Tacoma Rail employees who are covered by state and federal retirement plans. Employees of the Tacoma-Pierce County Health Department, as well as, certain employees of the Pierce Transit and Law Enforcement Support Agency who established membership in the System when these agencies were still City of Tacoma departments, are also members. The Board of Administration of the Tacoma Employees' Retirement System administers the plan and derives its authority in accordance with Chapter 41.28 RCW and Chapter 1.30 of the Tacoma City Code.

At the direction of the City Council, the System is administered by the Board of Administration (the Board) consisting of nine regular members and one alternate member. The members of the Board are: the Mayor, who serves as Chair; the Director of Finance; the City Manager (or designee); the Public Utilities Director (or designee); three elected employee representatives; one elected retired representative; and one City resident (not employed by the City) elected by the other eight members. The nine Board members appoint a TERS member, either active or retired, as an alternate Board member. The Board is required by the Tacoma Municipal Code to make annual reports to the City Council on the financial condition of the System. The Board, subject to City Council approval, appoints the Director who is responsible for managing the daily operations of the System.

The breakdown of membership as of December 31, 2015 is as follows:

Retirees and beneficiaries currently receiving benefits	2,234
Terminated vested and other terminated participants	644
Active members:	
City of Tacoma	2,654
South Sound 911	4
Pierce Transit	7
Tacoma-Pierce County Health Department	262
Total active members	<u>2,927</u>
Total membership	<u><u>5,805</u></u>

Membership – Substantially all employees of the City of Tacoma are members of the System, with the exception of police officers, firefighter, and Tacoma Rail employees, who are covered by state or federal retirement plans. Other members include employees of the Tacoma-Pierce County Health Department, and certain employees of the Pierce Transit and the South Sound 911 (formerly known as Law Enforcement Support Agency) who established membership in the System when these agencies were still City of Tacoma departments.

Benefits – There are two formulas to calculate the retirement benefits. The benefit paid will be issued on the formula which provides the higher benefit. The most commonly applied formula, "service retirement", is a product of the member's average monthly salary for the highest, consecutive 24-month period, the number of years of membership credit, and a percentage factor (2% maximum)

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

that is based on the member's age and years of service. The other formula is an annuity based on member contributions. There are several options available for the retiree to provide for their beneficiaries. The System also provides death, disability and deferred retirement. Additionally, the

System provides cost of living adjustment (COLA) increases up to 2.125% as of July 1st of each year; the actual COLA granted is dependent on the Consumer Price Index (Seattle Area – all items) over the preceding calendar year.

Any active member who has not retired, and has five or more years of service as a member may purchase up to five additional years of service at the time of retirement. Total service including service purchased cannot exceed 30 years.

The System participates in the portability of public retirement benefits in Washington State public retirement. As provided under Chapter 4154 of the RCW, this allows a member to use all years of service with qualified Washington systems to determine retirement eligibility and percentage factor for benefits under the System.

Contributions – The participating employers are responsible for funding the System at a level sufficient to pay obligations and ensure the actuarial and financial soundness of the System. Contribution rates for the employer and the employee are recommended by the Board of Administration and final approval rests with the Tacoma City Council. Currently, the required contribution rate for employees is 9.20% of their regular gross pay; the employer contributes 10.80%, for a combined total of 20.00% which is sufficient to amortize the UAAL of the System if future experience follows all actuarial assumptions. Changes to the contribution rate are subject to Sections 1.30.340 and 1.30.360 of the Tacoma Municipal Code.

Significant Assumptions – The following actuarial methods were used in the funding valuation.

Measurement Date	December 31, 2015
Valuation Date	January 1, 2016
Actuarial Cost Method	Entry Age Normal
	Funding is based on statutory contributions rate.
	This amount is compared to a 30-year amortization for the purposes of calculating the Actuarially Determined Contribution.
	The amortization method for the ADC is as follows:
Amortization Method	<ul style="list-style-type: none">• Level percent• Open periods• 30 year amortization period at 01/01/2016• 4% amortization growth rate
Asset Valuation Method	4 year smoothing period; Corridor - None
Inflation	3%
Salary Increases	4% general wage increase assumption
Investment Rate of Return	7.25%
Cost of Living Adjustment	2.13%
Retirement Age	Varies by age, gender, eligibility
Turnover	Varies by age, gender, eligibility
Mortality	RP-2000 mortality for healthy and disabled annuitants, with age adjustments

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

Benefit and Assumption Changes – The comparability of the data from year to year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, and other factors. Between January 1, 2015 and January 1, 2016 no assumptions were changed.

Target Allocations – The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting volatility and correlation. The capital market assumptions are per Milliman's investment consulting practice as of December 31, 2015. The target asset allocation is based on TERS Investment Policy Statement dated February 2014.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return
Investment Grade Fixed Income	15.0%	2.00%
US Inflation-Indexed Bonds	5.0%	1.41%
High Yield Bonds	9.0%	4.22%
Emerging Market Debt	5.0%	5.06%
Global Equity	41.5%	5.72%
Public Real Estate	2.0%	6.07%
Private Real Estate	2.5%	3.60%
Private Equity	10.0%	9.29%
Master Limited Partnerships	4.0%	3.98%
Timber	2.0%	3.73%
Infrastructure	2.0%	5.14%
Agriculture	2.0%	4.30%
Assumed Inflation - Mean		3.00%
Assumed Inflation - Standard Deviation		1.89%
Portfolio Arithmetic Real Mean Return		4.94%
Portfolio Median Nominal Geometric Return		7.06%
Portfolio Standard Deviation		11.84%
Long-Term Expected Rate of Return, net of investment expenses		7.25%

Sensitivity Analysis – The following presents the net pension liability (asset) of the System, calculated using the discount rate of 7.25%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.25%) or 1 percentage point higher (8.25%) than the current rate

	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
Net Pension Liability (asset)	\$ 24,152,376	\$ 7,788,151	\$ (5,992,361)

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

As of December 31, 2015, the deferred inflows and outflows of resources are as follows:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Difference Between Expected and Actual Experience	\$ (521,276)	\$ -
Net Difference Between Projected and Actual Earnings	-	6,864,209
Changes in Employer Proportion	(98)	5,642
Contributions Made Subsequent to the Measurement Date	-	2,124,252
Total	\$ (521,374)	\$ 8,994,103

The net amount of deferred inflows and outflows, other than contributions made subsequent to the measurement date, will be recognized as pension expense in each of the next four years.

Amounts will be recognized in pension expense as follows:

Year-ended December 31,	
2016	\$ 1,535,119
2017	1,535,119
2018	1,535,119
2019	1,763,645
2020	(20,525)
	<u>\$ 6,348,477</u>

The proportionate share of the Water Division is 8.99% of total System's pension liability. The proportionate share was based on the actual contributions for the year.

NOTE 11 OTHER POST EMPLOYMENT BENEFITS (OPEB)

Plan Description – The City charges some early retirees not yet eligible for Medicare a health premium based on the claims experience of active employees and retirees rather than based on the claims experience of retirees only. This difference is a benefit to the retirees, since health claims costs generally increase with age. GAAP requires that the portion of age-adjusted expected retiree health claims costs that exceed the premium charged to retirees be recognized as a liability for accounting purposes. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and are subject to continual revision as results are compared to past expectation and new estimates are made about the future.

Funding Policy – The City uses pay as you go funding; contributions to a separate trust are not required.

Annual OPEB Cost and Net OPEB Obligation – The Present Value of Benefits (PVB) is the present value of projected benefits discounted at the valuation interest rate (3.75%).

The Actuarial Accrued Liability (AAL) is the portion of the present value of benefits attributed to past service only. The portion attributed to future employee service is excluded. For inactive employees, the AAL is equal to the present value of benefits. For active employees, the actuarial present value of the projected benefits of each individual is allocated as a level percentage of expected salary for each year of employment between entry age (defined as age at hire) and assumed exit (until maximum retirement age). The portion attributed to service between entry

Annual OPEB Cost and Net OPEB Obligation – The Present Value of Benefits (PVB) is the present value of projected benefits discounted at the valuation interest rate (3.75%).

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The Normal Cost is that portion of the City provided benefit attributable to employee service in the current year.

The Annual Required Contribution (ARC) is the amount the City is required to report as an expense for the year. The ARC is equal to the Normal Cost plus an amount to amortize the UAAL on a closed basis of 30 years, beginning January 1, 2007. The remaining amortization period for 2016 is 21 years.

The ARC represents an accounting expense, but the City is not required to contribute the ARC to a separate trust. If the City does not set aside funds equal to the ARC (less current year benefit payments) each year, then the ARC (less benefit payments) will accumulate as a liability or Net OPEB Obligation on the balance sheet. The City has a Net OPEB Obligation as of December 31, 2016 as the City has not set aside funds for OPEB.

Excise Tax for High Cost or “Cadillac” Health Plans in 2018 and Beyond – An excise tax for high cost health coverage or “Cadillac” health plans was included in the Affordable Care Act (ACA) passed into law in March 2010. The provision levies a 40% tax on the value of health plan costs that exceed certain thresholds for single coverage or family coverage. The 2018 annual thresholds are \$10,200 for single coverage and \$27,500 for a family plan. If, between 2010 and 2018, the cost of health care insurance rises more than 55%, the threshold for the excise tax will be adjusted.

The City believes that the current provisions of ACA should be reflected in the projection of benefits and therefore, the value of the excise tax is included in the valuation. It is assumed that there will be no changes to the current law and that there will be no changes in plan design to help mitigate the impact of the tax.

GASB released two new statements for Post Employment Benefits Other than Pension Plans, or OPEB. The new GASB Statements 74 and 75 were released in June 2015 and will replace GASB 43 and 45. The statements are available via the GASB website. GASB 74 is effective for fiscal years beginning after June 15, 2016, and GASB 75 is effective for fiscal years beginning June 15, 2017. These statements will mean fundamental changes in financial reporting for OPEB.

Summary of Changes – As of the January 1, 2015 valuation the total AAL was \$208,814,312, for the City, 20% lower than expected primarily due to clarification in spouse benefits, medical costs, demographic experience and a change to the assumption for future medical trends.

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

The following table is a summary of valuation results with a comparison to the results from the last valuation.

	January 1, 2013	January 1, 2015
Total Membership:		
Active Employees	3,335	3,404
Terminated vested employees	394	442
Retired employees & dependents	846	744
Total	<u>4,575</u>	<u>4,590</u>
Annual Benefit Payments	\$ 9,887,335	\$ 8,963,089
Discount Rate	3.75%	3.75%
Present Value of Benefits (PVB)	\$ 326,742,538	\$ 262,184,195
Actuarial Accrued Liability (AAL)	\$ 251,839,846	\$ 208,814,312
Assets	-	-
Unfunded Actuarial Accrued Liability (UAAL)	<u>\$ 251,839,846</u>	<u>\$ 208,814,312</u>
Normal Cost	\$ 5,484,587	\$ 3,832,131
Annual Required Contribution (ARC)	\$ 20,058,760	\$ 16,966,964

The following table shows the total value of the benefits provided, the member paid premiums and the City paid benefits as of January 1, 2015.

Value of Subsidy at 3.75% Interest Rate	Total Value of Benefits	Member Paid Premiums	City Paid Benefits
Present Value of Benefits (PVB)	\$ 420,832,932	\$ 158,648,737	\$ 262,184,195
Actuarial Accrued Liability (AAL)	\$ 291,228,295	\$ 82,413,983	\$ 208,814,312
Normal Cost	\$ 9,501,758	\$ 5,669,627	\$ 3,832,131
Annual Benefit Payments	\$ 12,325,369	\$ 3,362,280	\$ 8,963,089

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

The following table shows the calculation of the Annual Required Contribution and Net OPEB Obligation for the City and for the Division as of December 31, 2016.

	City	Water
Determination of Annual Required Contribution:		
Normal Cost at Year-end	\$ 3,803,090	\$ 263,819
Amortization of UAAL	15,665,117	113,394
Annual Required Contribution (ARC)	<u>\$ 19,468,207</u>	<u>\$ 377,213</u>
Determination of Net OPEB Obligation:		
Annual Required Contribution (ARC)	\$ 19,468,207	\$ 377,213
Interest on prior year Net OPEB Obligation	2,666,468	118,141
Adjustments to ARC	<u>(3,983,647)</u>	<u>(146,437)</u>
Annual OPEB Cost	18,151,028	348,917
Actual benefits paid	<u>(8,539,402)</u>	<u>(114,698)</u>
Increase in Net OPEB Obligation	9,611,626	234,219
Net OPEB Obligation - beginning of year	<u>73,129,502</u>	<u>3,150,430</u>
Net OPEB Obligation - end of year	<u>\$ 82,741,128</u>	<u>\$ 3,384,649</u>

The Division has included the liability in the other long term liabilities on the Statement of Net Position.

Funding Status and Funding Progress – The following table shows the annual OPEB cost and net OPEB obligation for three years. This table is based upon a 3.75% interest rate.

	Annual OPEB Cost		Benefits Paid		Net OPEB Obligation	
Year Ended	City	Division	City	Division	City	Division
12/31/2014	\$19,319,944	\$575,750	\$9,292,539	\$165,318	\$66,138,206	\$2,908,139
12/31/2015	\$15,954,387	\$357,394	\$8,963,089	\$115,102	\$73,129,502	\$3,150,430
12/31/2016	\$18,151,028	\$348,917	\$8,539,402	\$114,698	\$82,741,128	\$3,384,649

Actuarial Methods and Assumptions – The actuarial cost method used for determining the benefit obligations is the Entry Age Normal Cost Method. Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of expected salary for each year of employment between entry age (defined as age at hire) and assumed exit (until maximum retirement age).

The portion of the actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the UAAL. In determining the Annual Required Contribution, the UAAL is amortized as a level percentage of expected payrolls for non-LEOFF 1 groups. For LEOFF 1, the UAAL is amortized as a level dollar amount. The amortization period was 30 years in 2007 and the remaining is now 21 years.

TACOMA WATER NOTES TO FINANCIAL STATEMENTS (continued)

Actuarial Methods and Significant Actuarial Assumptions:

Valuation Date:	January 1, 2015
Census Date:	January 1, 2015
Actuarial Cost Method:	Entry Age
Amortization Date:	Combination of level percentage and level dollar amount, see note above.
Remaining Amortization Period:	21 years, closed
Demographic Assumptions:	Demographic assumptions regarding retirements, disability, and turnover are based upon pension valuations for the various pension plans.

Actuarial Assumptions:

Discount Rate: 3.75% for pay-as-you-go funding

Medical Cost Trend:	2015	6.90%
	2016	6.60%
	2017	5.90%
	2020	5.50%
	2030	5.90%
	2040	5.70%

The medical cost rate is assumed to continue grading downward until achieving the ultimate rate of 4.8% in 2071 and beyond. These trend rates assume that, over time, deductibles and out-of-pocket maximums will be periodically increased as medical trends increase. The trends above do not reflect increases in costs due to the excise tax.

Economic Assumptions - Discount Rate (Liabilities):

3.75%

Demographic Assumptions:

Eligibility:

Disability - Five years of service are required for non-service connected disability.

Retirement - TERS members are eligible for retiree medical benefits after becoming eligible for service retirement pension benefits (either reduced or full pension benefits):

- Age 55 with 10 years of service
- Age 40 with 20 years of service

NOTE 12 COMMITMENTS AND CONTINGENCIES

Capital Improvements – The financial requirement for Tacoma Water's 2015-2016 biennial Capital Improvement program is approximately \$32.9 million and Tacoma Water has substantial contractual commitments relating to the program. At December 31, 2016 the remaining financial requirement for Capital Improvement Programs relating to all prior biennia is approximately \$4.0 million.

Muckleshoot Indian Tribe Settlement – A mutually beneficial settlement agreement was reached with the Muckleshoot Indian Tribe in 1995. The settlement package has a cost of approximately \$30 million and includes five basic elements: 1) building a fish restoration facility and annual operation and maintenance of that facility, or in the alternative, providing \$12 million (indexed at 1995 dollars) into a fish restoration fund; 2) providing for enhanced flows in the Green River; 3) transferring certain lands; 4) establishing a trust fund payable over 40 years which is intended to provide for the general welfare, educational and other needs of the Tribe; and 5) limited access into the Green River Watershed. The settlement resolved past damage claims by the Tribe for Tacoma Water's historical operations on the river, gain the Tribe's support for the Second Supply Project and provide the basis for a long-term, cooperative working relationship on the Green River. Tacoma Water has been implementing this agreement.

General Legal Matters – The Water Division has received several other miscellaneous claims or litigation that either do not allege material amounts or that the Legal Department has determined do not pose a risk of liability to the Utility.

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REQUIRED SUPPLEMENTARY INFORMATION

Proportionate Share of the Net Pension Liability Last 10 Years*

	Fiscal Year Ended December 31st,	
	2016	2015
Employer's proportion of the net pension liability (asset) as a percentage	8.99%	9.17%
Employer's proportion share of net pension liability (asset)	\$7,788,151	(\$881,279)
Employer's covered payroll	\$20,220,795	\$21,148,347
Employer's proportionate share of net pension liability (asset) as a percentage of its covered employee payroll	38.52%	-4.17%
Plan fiduciary net position as a percentage the total pension liability	93.94%	100.71%

Schedule of Contributions Last 10 Fiscal Years

	Fiscal Year Ended December 31st,	
	2016	2015
Contractually required employer contribution	\$2,124,252	\$2,086,719
Contributions in relation to the contractually required employer contribution	(\$2,124,252)	(\$2,086,719)
Employer contribution deficiency (excess)	-	-
Employer's covered employee payroll	\$20,220,795	\$21,148,347
Employer contribution as a percentage of covered-employee payroll	10.51%	9.87%

*Fiscal year 2015 was the first year of implementation; therefore, only two years are shown.

STATISTICAL DATA (Unaudited)

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

TEN-YEAR FINANCIAL REVIEW

STATEMENTS OF NET POSITION	2016	2015	2014	2013
ASSETS				
Utility Plant - Net	\$879,547,650	\$884,721,107	\$872,083,357	\$813,050,518
Special Funds & Non-Util Prop	157,320,446	143,802,732	146,933,170	157,311,979
Current Assets	68,927,643	64,476,112	58,737,269	63,568,675
Other Assets	2,866,478	4,689,200	3,769,208	4,679,599
Total Assets	1,108,662,217	1,097,689,151	1,081,523,004	1,038,610,771
Deferred Outflows	10,623,174	4,002,699	1,587,851	1,813,858
TOTAL ASSETS AND DEFERRED OUTFLOWS .	1,119,285,391	1,101,691,850	1,083,110,855	1,040,424,629
NET POSITION	549,652,226	542,501,823	516,673,245	480,288,973
LIABILITIES AND EQUITY				
Long-Term Debt	478,617,199	478,400,742	483,542,005	455,876,975
Current Liabilities	20,986,727	18,261,548	20,767,576	42,478,805
Long-Term Liabilities	33,932,418	26,021,937	26,552,582	26,204,429
Total Liabilities	533,536,344	522,684,227	530,862,163	524,560,209
Deferred Inflows	36,096,821	36,505,800	35,575,447	35,575,447
TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS	\$1,119,285,391	\$1,101,691,850	\$1,083,110,855	\$1,040,424,629
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION				
OPERATING REVENUES				
Residential and Domestic	\$50,742,135	\$48,263,128	\$44,655,076	\$40,928,355
Commercial and Industrial	17,558,905	17,233,617	15,406,078	13,507,899
Special Rate-Simpson/Other	5,845,719	5,951,348	5,801,842	5,242,359
Municipal	-	-	-	445,844
Wholesale	3,971,839	5,192,149	3,718,315	3,519,409
Unbilled	(137,857)	318,945	121,346	468,030
Total Water Sales	77,980,741	76,959,187	69,702,657	64,111,896
Other Operating Revenues	14,820,869	21,179,637	28,617,297	32,007,524
Total Operating Revenues	92,801,610	98,138,824	98,319,954	96,119,420
OPERATING EXPENSES				
Operation and Maintenance	46,894,363	41,804,233	37,993,563	35,906,356
Taxes	4,639,031	4,681,114	3,779,373	3,918,944
Depreciation	23,822,527	17,102,664	16,783,698	16,072,243
Total Operating Expenses	75,355,921	63,588,011	58,556,634	55,897,543
NET OPERATING INCOME (LOSS)	17,445,689	34,550,813	39,763,320	40,221,877
NON-OPERATING REVENUES (EXPENSES)				
Other Income	(221,125)	(30,042)	537,052	(1,246,053)
Interest Income	1,826,299	1,112,850	1,718,226	807,466
Gain from Disposition of Property	-	-	-	-
Interest Charges (Net)	(19,000,536)	(16,677,645)	(11,911,850)	(14,141,036)
Net Income (Loss) Before Contributions & Transfers	50,327	18,955,976	30,106,748	25,642,254
Total Capital Contributions	10,274,030	9,052,674	8,670,639	7,175,575
Grants & Federal BAB Subsidies	3,579,107	3,609,706	3,959,446	3,535,426
Transfers Out	(6,753,061)	(6,873,467)	(6,352,561)	(5,922,418)
CHANGE IN NET POSITION	\$7,150,403	\$24,744,889	\$36,384,272	\$30,430,837

In accordance with Governmental Accounting Standards Board Statement No. 65 both 2012 and 2011 were restated for comparative purposes. Years prior to 2011 are shown as originally reported.

2012	2011	2010	2009	2008	2007
\$722,852,270	\$661,153,297	\$636,592,771	\$604,657,775	\$590,593,258	\$568,493,015
161,863,075	214,619,106	240,132,895	133,949,294	80,858,401	99,062,414
56,407,560	31,403,521	30,200,303	35,753,843	22,151,467	23,150,235
5,300,185	4,664,090	4,654,608	3,654,494	3,319,156	2,123,339
946,423,090	911,840,014	911,580,577	778,015,406	696,922,282	692,829,003
1,764,332	2,056,555	-	-	-	-
948,187,422	913,896,569	911,580,577	778,015,406	696,922,282	692,829,003
449,858,136	425,932,810	417,695,083	412,592,671	404,010,304	391,763,317
401,465,338	419,800,757	421,228,553	292,165,406	218,869,015	227,315,790
35,106,590	18,201,697	20,548,451	15,167,938	16,288,305	15,169,687
26,181,911	19,385,858	52,108,490	58,089,391	57,754,658	58,580,209
462,753,839	457,388,312	493,885,494	365,422,735	292,911,978	301,065,686
35,575,447	30,575,447	-	-	-	-
\$948,187,422	\$913,896,569	\$911,580,577	\$778,015,406	\$696,922,282	\$692,829,003
\$38,737,505	\$36,730,275	\$35,503,069	\$36,695,919	\$34,651,756	\$32,719,149
12,478,932	11,868,976	11,703,099	11,467,636	10,600,262	9,868,874
5,031,760	4,774,237	3,798,922	4,153,327	4,371,527	3,917,760
383,385	400,322	364,357	380,267	349,722	396,131
2,090,430	1,625,163	1,530,116	1,776,686	1,251,815	1,433,705
416,986	478,594	(648,438)	187,966	417,145	37,113
59,138,998	55,877,567	52,251,125	54,661,801	51,642,227	48,372,732
21,541,733	9,526,467	10,735,630	9,331,955	5,382,313	4,353,478
80,680,731	65,404,034	62,986,755	63,993,756	57,024,540	52,726,210
32,602,452	32,821,611	34,453,742	34,055,463	33,387,663	31,076,515
3,485,243	3,106,516	3,142,772	3,093,311	2,881,877	2,924,930
15,262,686	14,389,681	14,474,964	13,845,799	13,016,544	11,363,970
51,350,381	50,317,808	52,071,478	50,994,573	49,286,084	45,365,415
29,330,350	15,086,226	10,915,277	12,999,183	7,738,456	7,360,795
288,182	(12,371)	33,795	497,331	61,265	306,680
2,320,753	3,141,374	2,370,993	1,955,385	3,730,407	5,255,881
-	-	-	26,100	-	4,199,382
(14,462,441)	(14,867,263)	(15,175,660)	(9,076,156)	(8,406,264)	(8,484,405)
17,476,844	3,347,966	(1,855,595)	6,401,843	3,123,864	8,638,333
7,834,345	9,250,677	9,713,596	7,120,993	14,137,605	12,801,825
3,840,767	4,006,209	2,355,132	244,683	-	-
(5,226,630)	(4,960,736)	(5,110,721)	(5,185,152)	(5,014,482)	(4,562,657)
\$23,925,326	\$11,644,116	\$5,102,412	\$8,582,367	\$12,246,987	\$16,877,501

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
REGIONAL WATER SUPPLY SYSTEM

TEN-YEAR FINANCIAL REVIEW

STATEMENTS OF NET POSITION	2016	2015	2014	2013
ASSETS				
Utility Plant - Net	\$287,187,547	\$295,780,351	\$293,110,553	\$264,883,717
Current Assets	10,395,435	9,274,080	11,321,557	20,473,681
Total Assets	297,582,982	305,054,431	304,432,110	285,357,398
Deferred Outflows	256,313	272,417	288,520	304,624
TOTAL ASSETS AND DEFERRED OUTFLOWS .	297,839,295	305,326,848	304,720,630	285,662,022
 NET POSITION	180,852,158	186,712,448	183,898,541	154,285,209
LIABILITIES AND EQUITY				
Long-Term Debt	114,364,416	116,113,730	117,798,157	120,006,348
Current Liabilities	1,601,549	1,496,773	1,993,880	10,436,851
Total Liabilities	115,965,965	117,610,503	119,792,037	130,443,199
Deferred Inflows	1,021,172	1,003,897	1,030,052	933,614
TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS	297,839,295	305,326,848	304,720,630	285,662,022
 STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION				
OPERATING REVENUES				
CRO - Debt Service	\$5,582,030	\$6,047,314	\$6,008,599	\$6,208,432
CRO - O&M	3,858,714	2,840,435	2,706,023	2,740,645
CRO - Capital	483,498	7,621,901	15,132,508	18,535,695
Other Operating Revenue	-	1,675	-	-
Total Operating Revenues	9,924,242	16,511,325	23,847,130	27,484,772
 OPERATING EXPENSES				
Operation and Maintenance	3,871,737	2,864,326	2,735,246	2,895,385
Depreciation	8,263,267	4,582,300	4,542,912	4,505,158
Total Operating Expenses	12,135,004	7,446,626	7,278,158	7,400,543
NET OPERATING INCOME (LOSS)	(2,210,762)	9,064,699	16,568,972	20,084,229
NON-OPERATING REVENUES (EXPENSES)				
Other Income	-	(120,564)	(18,732)	(373,899)
Interest Income	87,696	64,497	114,387	51,743
Interest Charges (Net)	(4,715,565)	(4,072,780)	(880,966)	(2,665,310)
Net Income (Loss) Before Contributions & Transfers	(6,838,631)	4,935,852	15,783,661	17,096,763
Total Capital Contributions	456,685	(2,924,135)	13,024,297	148,865
Grants & Federal BAB Subsidies	808,775	802,190	805,374	799,296
Transfers Out	(287,119)	-	-	40,079
 CHANGE IN NET POSITION	<u>(\$5,860,290)</u>	<u>\$2,813,907</u>	<u>\$29,613,332</u>	<u>\$18,085,003</u>

In accordance with Governmental Accounting Standards Board Statement No. 65 both 2012 and 2011 were restated for comparative purposes. Years prior to 2011 are shown as originally reported.

2012	2011	2010	2009	2008	2007
\$223,896,711	\$203,938,358	\$207,242,527	\$206,708,069	\$231,099,649	\$234,373,114
41,256,611	55,640,447	59,811,400	15,845,604	9,519,659	8,924,226
265,153,322	259,578,805	267,053,927	222,553,673	240,619,308	243,297,340
-	-	1,194,533	807,387	856,484	906,294
265,153,322	259,578,805	268,248,460	223,361,060	241,475,792	244,203,634
136,200,206	132,830,089	138,246,799	142,801,029	151,581,061	149,348,807
122,882,652	124,045,739	124,890,764	77,694,584	88,122,323	92,649,652
5,253,742	1,931,325	5,110,897	2,865,447	1,772,408	2,205,175
128,136,394	125,977,064	130,001,661	80,560,031	89,894,731	94,854,827
816,722	771,652	-	-	-	-
265,153,322	259,578,805	268,248,460	223,361,060	241,475,792	244,203,634
\$6,272,476	\$6,239,797	\$5,119,047	\$4,293,912	\$2,016,804	\$1,999,664
2,478,238	1,778,186	2,732,956	2,517,129	6,074,980	4,646,715
5,665,557	274,081	1,301,346	(339,930)	-	-
-	-	-	-	-	-
14,416,271	8,292,064	9,153,349	6,471,111	8,091,784	6,646,379
2,510,085	2,485,977	2,458,379	2,629,850	2,300,026	2,377,499
4,495,971	4,482,820	4,426,113	4,792,037	4,803,549	3,513,441
7,006,056	6,968,797	6,884,492	7,421,887	7,103,575	5,890,940
7,410,215	1,323,267	2,268,857	(950,776)	988,209	755,439
-	-	-	-	14,360	43,532
407,622	396,391	861,775	184,332	293,709	355,782
(4,901,784)	(7,574,948)	(4,833,300)	(3,918,240)	(3,411,937)	(4,083,294)
2,916,053	(5,855,290)	(1,702,668)	(4,684,684)	(2,115,659)	(2,928,541)
(414,376)	(508,791)	(4,593,787)	8,085,876	1,287,306	10,186,209
868,328	868,328	306,327	-	-	-
112	79,043	1,435,898	(12,181,224)	3,060,607	5,227,148
\$3,370,117	(\$5,416,710)	(\$4,554,230)	(\$8,780,032)	\$2,232,254	\$12,484,816

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

STATEMENTS OF NET POSITION

	ASSETS		TACOMA WATER STATEMENTS	
	WATER		ADJUSTMENTS	
	W/O RWSS	RWSS		
UTILITY PLANT				
In Service, at Original Cost	\$ 736,745,320	\$ 337,252,246	\$ -	\$ 1,073,997,566
Less - Accumulated Depreciation	(157,550,217)	(57,471,481)	-	(215,021,698)
Total	579,195,103	279,780,765	-	858,975,868
Construction Work In Progress	13,165,000	7,406,782		20,571,782
Net Utility Plant	592,360,103	287,187,547	-	879,547,650
NET UTILITY PROPERTY	492,963	-	-	492,963
SPECIAL FUNDS				
Construction Funds	41,717,595	-	-	41,717,595
Debt Service Funds	4,093,776	300,502	-	4,394,278
Bond Reserve Funds	13,615,236	8,415,649	-	22,030,885
System Development Charge Fund	58,617,922	-	-	58,617,922
Other Cash & Equity in Pooled Investments	28,984,849	-	1,081,954	30,066,803
Total Special Funds	147,029,378	8,716,151	1,081,954	156,827,483
CURRENT ASSETS				
Operating Funds Cash & Equity in				
Pooled Investments	54,768,598	1,081,954	(1,081,954)	54,768,598
Accounts Receivable	5,040,588	455,753	-	5,496,341
(Net of Allowance for Doubtful Accounts of \$258,344 in 2014)				
BABs Interest Subsidies Receivable	230,612	67,368	-	297,980
Accrued Unbilled Revenues	4,797,144	-	-	4,797,144
Materials and Supplies	2,341,548	-	-	2,341,548
Interfund Receivable	107,094	876	-	107,970
Prepayments	1,044,729	73,333	-	1,118,062
	68,330,313	1,679,284	(1,081,954)	68,927,643
OTHER ASSETS				
Regulatory Asset - Public Fire Protection Fees	1,297,001	-	-	1,297,001
Regulatory Asset - Surcharges	1,569,477	-	-	1,569,477
Pension Asset	-	-	-	-
Total Other Assets	2,866,478	-	-	2,866,478
DEFERRED OUTFLOWS OF RESOURCES				
Unamortized Losses on Refunding Bonds	1,372,758	256,313	-	1,629,071
Pension Contributions	8,994,103	-	-	8,994,103
Total Deferred Outflows	10,366,861	256,313	-	10,623,174
TOTAL ASSETS AND DEFERRED OUTFLOWS	\$ 821,446,096	\$ 297,839,295	\$ -	\$ 1,119,285,391

NET ASSETS AND LIABILITIES	TACOMA WATER STATEMENTS	
	WATER W/O RWSS	RWSS
NET ASSETS		
Invested in Capital Assets, Net of Related Debt	\$ 266,048,160	\$ 180,470,093
Restricted for:		
Water Capital and System Development Charge	43,533,806	-
Debt Service Funds	2,647,811	(151,827)
Unrestricted	56,570,291	533,892
Total Net Position	368,800,068	180,852,158
LONG-TERM DEBT		
Revenue Bonds	271,700,730	114,364,416
Public Works Trust Fund Loans	22,708,007	-
Drinking Water State Revolving Fund Loan	69,844,046	-
Total Long-Term Debt	364,252,783	114,364,416
CURRENT LIABILITIES		
Current Maturities of Long-Term Debt	12,128,017	1,025,000
Current Maturities of Long-Term Liabilities	185,889	-
Accrued Taxes	1,492,124	352
Accrued Expenses and Contracts Payable	1,508,021	39,769
Salaries, Wages and Fringe Benefits Payable	680,647	-
Interest Payable	1,445,965	452,329
Customers' Deposits	349,725	-
Interfund Payables	1,594,790	84,099
Total Current Liabilities	19,385,178	1,601,549
LONG-TERM LIABILITIES		
Muckleshoot Agreements	6,943,806	-
Customer Advances for Construction	4,748,046	-
Unearned Revenue	6,547,640	1,021,172
Long-Term Accrued Compensated Absences	2,428,375	-
Pension Liability	7,788,151	-
Other Long-Term Liabilities	4,455,228	-
Total Long-Term Liabilities	32,911,246	1,021,172
DEFERRED INFLOWS OF RESOURCES		
Rate Stabilization	35,575,447	-
Pension Contribution	521,374	-
Total Inflows of Resources	36,096,821	-
TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS	\$ 821,446,096	\$ 297,839,295

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	WATER		RWSS		ADJUSTMENTS		TACOMA WATER STATEMENTS
	W/O	RWSS					
OPERATING REVENUES							
Sale of Water	\$ 77,980,741	\$	-	\$	-	\$	77,980,741
Other Operating Revenues	9,997,213		-		-		9,997,213
Contract Resource Obligation Revenues	-		9,924,242		(5,100,586)		4,823,656
Total Operating Revenues	87,977,954		9,924,242		(5,100,586)		92,801,610
OPERATING EXPENSES							
Operations	21,860,765		180,577		-		22,041,342
Production	10,896,695		3,437,868		-		14,334,563
Administrative and General	15,365,752		253,292		(5,100,586)		10,518,458
Depreciation	15,559,260		8,263,267		-		23,822,527
Taxes	4,639,031		-		-		4,639,031
Total Operating Expenses	68,321,503		12,135,004		(5,100,586)		75,355,921
Net Operating Income	19,656,451		(2,210,762)		-		17,445,689
NON-OPERATING REVENUES (EXPENSES)							
Interest Income	1,738,603		87,696		-		1,826,299
Other	(221,125)		-		-		(221,125)
Interest on Long-Term Debt	(15,285,352)		(5,468,902)		-		(20,754,254)
Amortization of Premium and Loss on Refunding	561,415		708,210		-		1,269,625
Interest Charged to Construction	438,966		45,127		-		484,093
Total Non-Operating Expenses	(12,767,493)		(4,627,869)		-		(17,395,362)
Net Income Before Capital Contributions and Transfers	6,888,958		(6,838,631)		-		50,327
Capital Contributions							
Cash	5,250,653		456,685		-		5,707,338
Donated Fixed Assets	4,566,692		-		-		4,566,692
Federal BABs Subsidies	2,768,580		808,775		-		3,577,355
Grants	1,752		-		-		1,752
Transfers							
City of Tacoma Gross Earnings Tax	(6,753,061)		-		-		(6,753,061)
Transfer to/from Other Funds	287,119		(287,119)		-		-
CHANGE IN NET POSITION	13,010,693		(5,860,290)		-		7,150,403
TOTAL NET POSITION - BEGINNING OF YEAR	355,789,375		186,712,448		-		542,501,823
TOTAL NET POSITION - END OF YEAR	\$ 368,800,068		\$ 180,852,158		\$ -		\$ 549,652,226

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

BOND DEBT SERVICE REQUIREMENTS
DECEMBER 31, 2016

YEAR	WATER W/O RWSS		RWSS		TOTAL
	PRINCIPAL	INTEREST	PRINCIPAL	INTEREST	
2017	5,200,000	13,460,060	1,025,000	5,427,937	25,112,997
2018	5,395,000	13,308,633	1,055,000	5,382,286	25,140,919
2019	5,620,000	13,092,833	1,990,000	5,335,336	26,038,169
2020	5,850,000	12,852,833	2,100,000	5,241,836	26,044,669
2021	6,150,000	12,560,333	2,205,000	5,143,036	26,058,369
2022	6,410,000	12,297,633	2,315,000	5,035,935	26,058,568
2023	6,240,000	11,977,133	2,455,000	4,923,486	25,595,619
2024	4,300,000	11,665,133	4,930,000	4,804,186	25,699,319
2025	4,465,000	11,460,042	5,190,000	4,561,236	25,676,278
2026	4,930,000	11,244,560	5,420,000	4,300,364	25,894,924
2027	5,085,000	11,003,926	5,700,000	4,027,936	25,816,862
2028	5,265,000	10,730,811	5,970,000	3,741,451	25,707,262
2029	5,445,000	10,448,028	6,300,000	3,441,430	25,634,458
2030	5,640,000	10,155,577	6,595,000	3,124,854	25,515,431
2031	5,835,000	9,852,652	6,880,000	2,855,021	25,422,673
2032	6,050,000	9,524,667	6,660,000	2,572,446	24,807,113
2033	11,915,000	9,184,597	4,495,000	2,298,427	27,893,024
2034	12,360,000	8,502,115	4,655,000	2,045,763	27,562,878
2035	12,820,000	7,794,144	4,830,000	1,784,105	27,228,249
2036	13,295,000	7,059,824	5,005,000	1,512,611	26,872,435
2037	13,790,000	6,298,290	5,185,000	1,231,280	26,504,570
2038	14,305,000	5,508,406	5,375,000	939,831	26,128,237
2039	14,835,000	4,689,020	5,570,000	637,703	25,731,723
2040	15,390,000	3,839,272	5,775,000	324,613	25,328,885
2041	23,820,000	2,974,200	-	-	26,794,200
2042	24,770,000	2,021,400	-	-	26,791,400
2043	25,765,000	1,030,600	-	-	26,795,600
	<u>\$270,945,000</u>	<u>\$244,536,722</u>	<u>\$107,680,000</u>	<u>\$80,693,109</u>	<u>\$703,854,831</u>

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER
without RWSS
FUNDS AVAILABLE FOR DEBT SERVICE

	2016	2015	2014	2013	2012
Total Income	\$94,688,383	\$92,203,086	\$86,134,608	\$77,677,321	\$77,504,402
Less: Operating Exp	52,762,243	48,438,968	43,722,021	41,649,837	37,833,621
Income Available for Debt Service	<u>\$41,926,140</u>	<u>\$43,764,118</u>	<u>\$42,412,587</u>	<u>\$36,027,484</u>	<u>\$39,670,781</u>
Bond Redemption	5,140,416	4,873,754	5,551,250	6,957,496	5,817,917
Bond Interest	13,156,254	13,913,407	14,303,864	14,032,328	19,342,423
Debt Service Payable	<u>\$18,296,670</u>	<u>\$18,787,161</u>	<u>\$19,855,114</u>	<u>\$20,989,824</u>	<u>\$25,160,340</u>
Times Debt Service Covered	2.29	2.33	2.14	1.72	1.58

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

SUMMARY OF WATER SALES - 2016

	AVERAGE MONTHS BILLED	CONSUMPTION (CCF)	REVENUE	% of TOTAL REVENUE	MGD	% of TOTAL MGD
RESIDENTIAL AND DOMESTIC SERVICE						
Inside City						
1 Single and Multiple House	55,278	4,663,915	\$ 21,783,082	28.0%	9.56	19.0%
2 Multiple Unit Dwellings	3,239	1,690,719	\$ 5,548,904	7.1%	3.47	6.9%
3 Parks & Irrigation Services	188	99,278	\$ 399,338	0.5%	0.20	0.4%
4 Private Fire Services	103	988	\$ 78,627	0.1%	0.00	0.0%
	58,808	6,454,900	\$ 27,809,951	35.7%	13.23	26.3%
Outside City						
5 Single and Multiple Houses	33,500	3,538,397	\$ 17,992,823	23.1%	7.25	14.4%
6 Multiple Unit Dwellings	1,843	1,045,128	\$ 4,257,072	5.5%	2.14	4.2%
7 Parks & Irrigation Services	232	152,402	\$ 646,164	0.8%	0.31	0.6%
8 Private Fire Services	80	2	\$ 36,125	0.0%	0.00	0.0%
	35,655	4,735,929	\$ 22,932,184	29.4%	9.70	19.2%
COMMERCIAL AND INDUSTRIAL SERVICE						
Inside City						
9 Large Volume Service	3	450,874	\$ 730,903	0.9%	0.92	1.8%
10 General Service	3,839	2,440,172	\$ 8,093,570	10.4%	5.00	9.9%
11 Parks & Irrigation Services	372	384,379	\$ 1,514,617	1.9%	0.79	1.6%
12 Private Fire Services	789	11,035	\$ 2,670,988	3.4%	0.02	0.0%
	5,003	3,286,460	\$ 13,010,078	16.6%	6.73	13.3%
Outside City						
13 Large Volume Service	4	584,260	\$ 1,136,570	1.5%	1.20	2.4%
14 General Service	990	486,843	\$ 1,994,916	2.6%	1.00	2.0%
15 Parks & Irrigation Services	86	114,401	\$ 501,992	0.6%	0.23	0.5%
16 Private Fire Services	167	2,381	\$ 915,349	1.2%	0.01	0.0%
	1,247	1,187,885	\$ 4,548,827	5.9%	2.44	4.9%
17 WESTROCK	1	7,240,604	\$ 5,845,719	7.5%	14.84	29.4%
21 WHOLESALE	17	1,705,218	\$ 3,971,839	5.1%	3.50	6.9%
Unbilled Revenue			\$ (137,857)	-0.2%		
TOTAL WATER SALES	100,731	24,610,996	\$ 77,980,741	100.0%	50.44	100.0%

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

STATISTICS
AS OF DECEMBER 31, 2016

Tacoma Water System:

Average daily delivery exclusive of pulp mill	38.99 MG
Average daily delivery of pulp mill	14.81 MG
Total average daily delivery	53.80 MG

Maximum daily production	8/19/2016	83.92 MG
Minimum daily production	1/29/2016	32.92 MG

Total water produced in 2016* 19,652 MG

Regional Water Supply System (RWSS):

Total average daily delivery 12.3 MG

Average daily consumption per single family residential service 173.0 GPD

Miles of transmission and wells supply mains - 28" to 96" diameter (includes North Fork wells system) 150 mi

Miles of distribution mains - 2" to 24" in diameter 1,240 mi

Fire Hydrants (Inside) 6,050
Fire Hydrants (Outside) 4,528

The primary source of Tacoma's water supply is the Green River. Additionally the North Fork well field provides blending options during periods of excessive river turbidity. The Green River source consists of a 73 million gallons per day (MGD) water right. Tacoma is also partner in the Regional Water Supply System (RWSS) and holds a 27 MGD average share of that 64.6 MGD interruptible, junior water right on the Green River. Tacoma also has ground water rights totaling 87 MGD with an installed pumping capacity of 55 MGD.

Tacoma's water supply is robust and of very high quality, benefiting from decades of source protection and substantial investment in treatment. City of Tacoma business and residents continued to receive extraordinary service reliability while meeting or exceeding all regulatory requirements of the United States Environmental Protection Agency and the Washington Department of Health.

Storage facilities are provided at 15 locations. These facilities consist of 10 concrete tanks and 12 steel standpipes. The combined storage capacity is equal to approximately 140.7 million gallons. Of this storage capacity 67.6 million gallons are located at the McMillin Reservoir approximately 14 miles southeast of Tacoma.

**Includes losses and water for self-consumption excludes RWSS*

MG equals million gallons

GPD equals gallons per day

mi equals miles

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

TAXES AND EMPLOYEE WELFARE CONTRIBUTIONS
FOR THE YEAR 2016

FEDERAL

Social Security (FICA)		\$1,533,689
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STATE OF WASHINGTON

Retail Sales Tax	\$587,049	
Utilities and Business Activities Tax	3,972,441	
Total		4,559,490

COUNTY

Real Property	35,940	
Total		35,940

MUNICIPALITIES

City of Tacoma Gross Earnings Tax	6,753,061	
City of Fircrest Administrative Fee	6,397	
City of Lakewood Administrative Fee	6,450	
City of Puyallup Administrative Fee	19,625	
City of University Place Administrative Fee	620,720	
		7,406,253

TOTAL TAXES		\$13,535,372
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Taxes as a % of Non-CRO Revenues of \$87,977,954 ..		15.38%
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EMPLOYEE WELFARE CONTRIBUTIONS

Industrial Insurance and Medical Aid	\$512,054	
Pensions	2,094,717	
Medical Insurance	3,837,167	
Dental Insurance	330,983	

TOTAL EMPLOYEE WELFARE CONTRIBUTIONS		\$6,774,921
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CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

2016 WATER RATES

			READY TO SERVE CHARGE PER MONTH	
			INSIDE TACOMA	OUTSIDE TACOMA
METER SIZE				
5/8	inch	.....	\$20.38	\$24.46
3/4	inch	.....	\$30.57	\$36.68
1	inch	.....	\$50.95	\$61.14
1-1/2	inch	.....	\$101.90	\$122.28
2	inch	.....	\$163.04	\$195.65
3	inch	.....	\$305.70	\$366.84
4	inch	.....	\$509.50	\$611.40
6	inch	.....	\$1,019.00	\$1,222.80
8	inch	.....	\$1,630.40	\$1,956.48
10	inch	.....	\$2,343.70	\$2,812.44
12	inch	.....	\$3,439.13	\$4,126.96

			CHARGE FOR WATER USED PER MONTH PER 100 CUBIC FEET	
			INSIDE TACOMA	OUTSIDE TACOMA
<u>Residential Service</u>				
Each 100 cubic ft. of water consumption during the winter months of October through May			\$1.756	\$2.107
First 500 cubic ft. of water consumption per month during the summer months of June through September			\$1.756	\$2.107
Each 100 cubic ft. of water consumption over 500 cubic ft. during the summer months of June through September			\$2.195	\$2.634
<u>Commercial and Industrial</u>				
General Service			\$1.945	\$2.334
Large Volume Service (over 65,000 cubic feet annually)			\$1.557	\$1.868
<u>Parks and Irrigation Service</u>				
Each 100 cubic feet of water consumption			\$2.769	\$3.323

City of Tacoma water services are 100% metered.

Where service conditions are considered extraordinary, the Water Division may, with City Council approval, enter into contracts for periods up to 20 years.

Water rates were established by Ordinance No. 28286 and were effective January 1, 20

Residential service rate for outside Tacoma does not include Fircrest, Puyallup, University Place, and Lakewood.

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA WATER

2016 FIRE PROTECTION RATES

RATES FOR PRIVATE FIRE PROTECTION SERVICE ON A SEPARATE METER INSIDE THE CITY OF TACOMA ARE AS FOLLOWS:

METER SIZE		MONTHLY CHARGE	WATER INCLUDED FOR MONTHLY LEAKAGE AND TESTING PURPOSES (100 Cubic Feet)
2	inch	\$24.82	2.99
3	inch	\$36.14	2.99
4	inch	\$60.38	2.99
6	inch	\$135.43	2.99
8	inch	\$241.10	2.99
10	inch	\$377.11	2.99
12	inch	\$603.19	2.99

No charge is made for water used through a fire service in extinguishing fires of incendiary or accidental origin if the customer, at the location where the use occurs, gives written notice to the Division within ten days from the time of such fire. Use water through a fire service for purposes other than extinguishing fires of incendiary or accidental origin is charged as follows:

MONTHLY CHARGE

12 times the monthly service charge (minimum).

CONSUMPTION

Rates per 100 cubic feet per month \$3.960

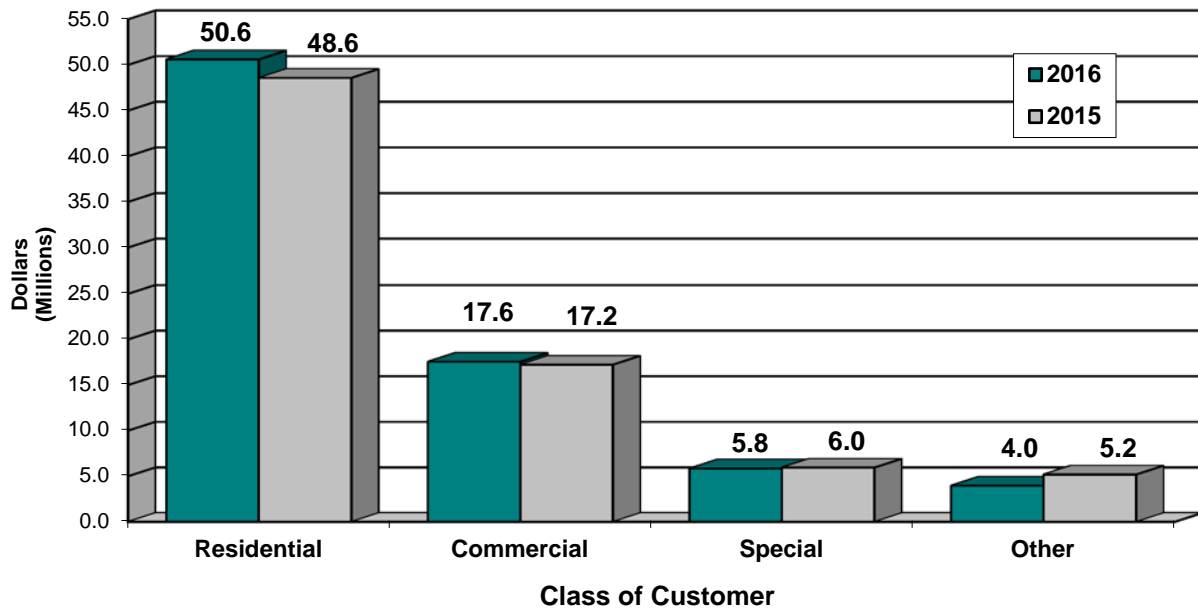
The above rates for fire service shall apply where City water is used for all purposes on such premises exclusive of that amount allowed for testing and leakage.

Costs associated with fire hydrant services are currently recovered from customers in two different ways, depending on their location in the service area. Customers outside the City of Tacoma with residential and commercial accounts pay a flat monthly franchise "Franchise Hydrant Service Fee" as shown below:

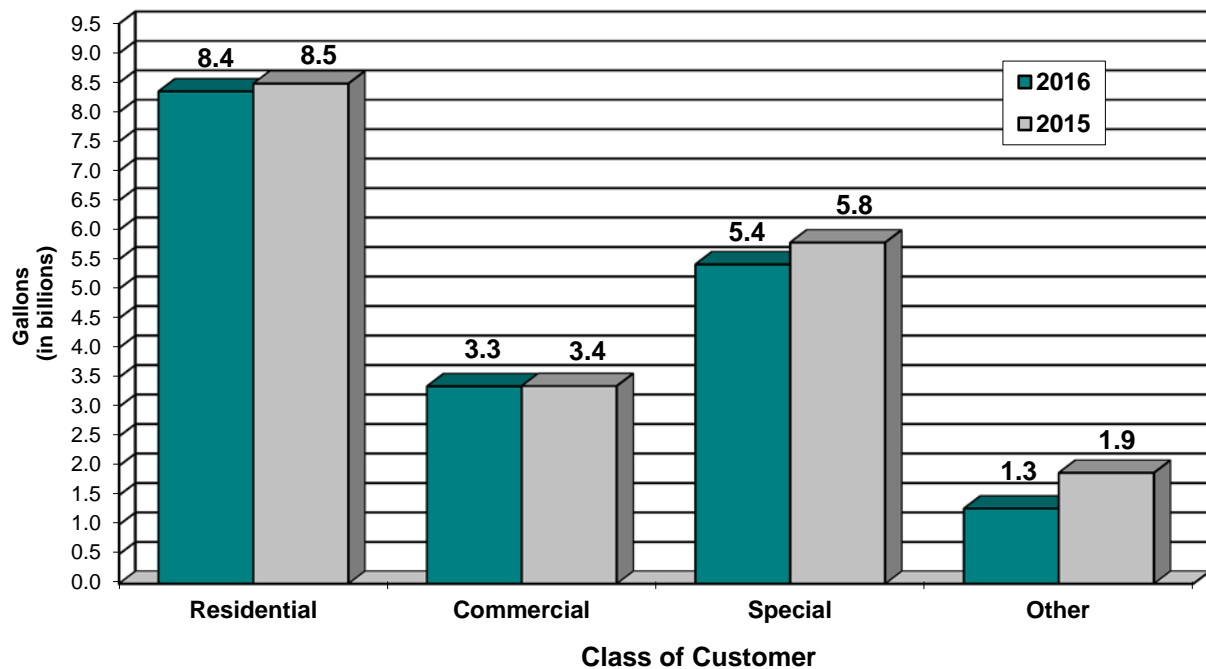
Outside City, other contract.....	\$4.752
Fircrest Franchise.....	\$4.752
Lakewood, Puyallup, and University Place Franchises.	\$4.752

The Fire Protection Rates were established by Ordinance No. 28286 and were effective January 1, 2016.

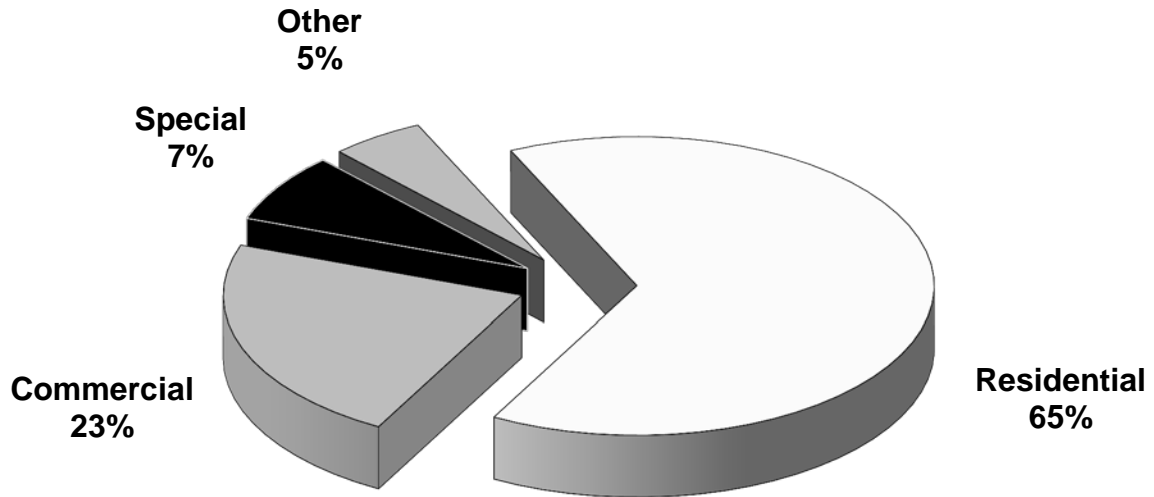
WATER SALES
Year to Date - December 2016 & 2015



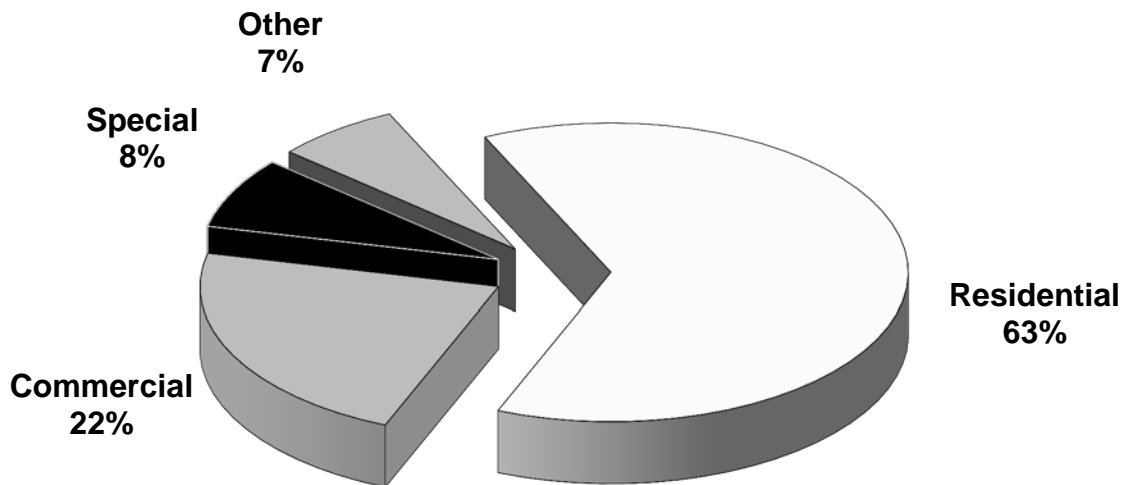
WATER CONSUMPTION
Year to Date - December 2016 & 2015



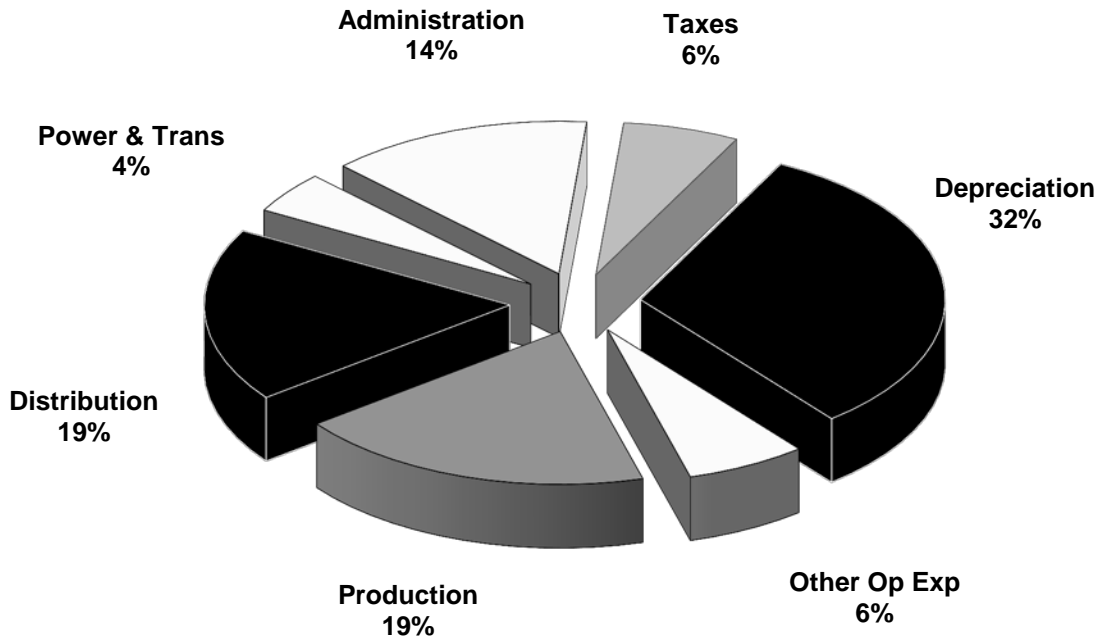
WATER SALES
Year to Date - December 2016
(\$77,980,741)



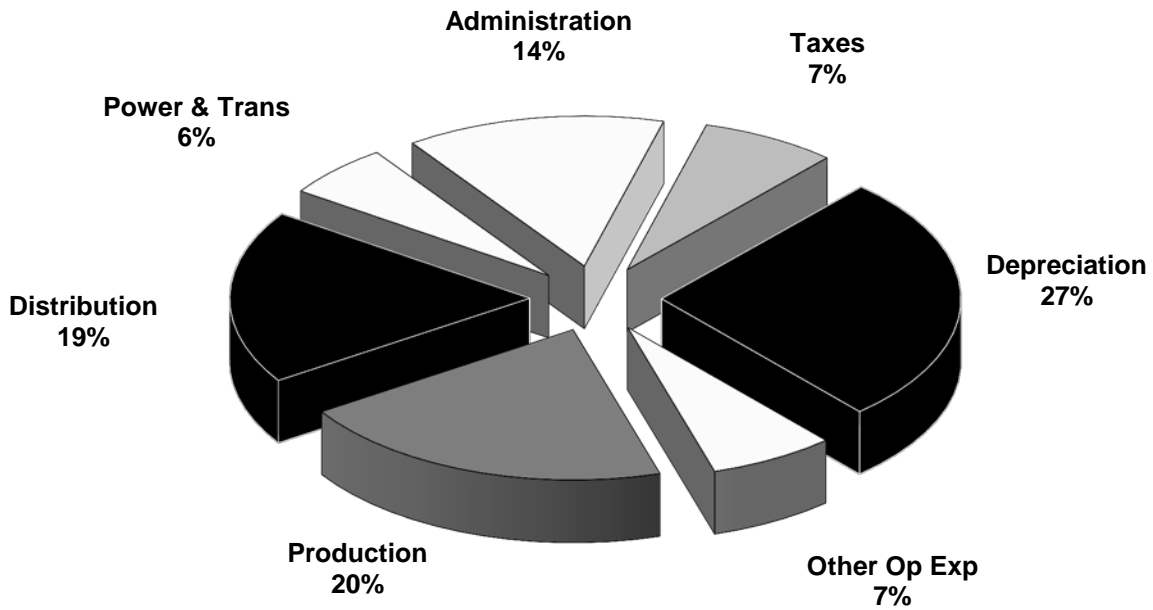
WATER SALES
Year to Date - December 2015
(\$76,959,187)



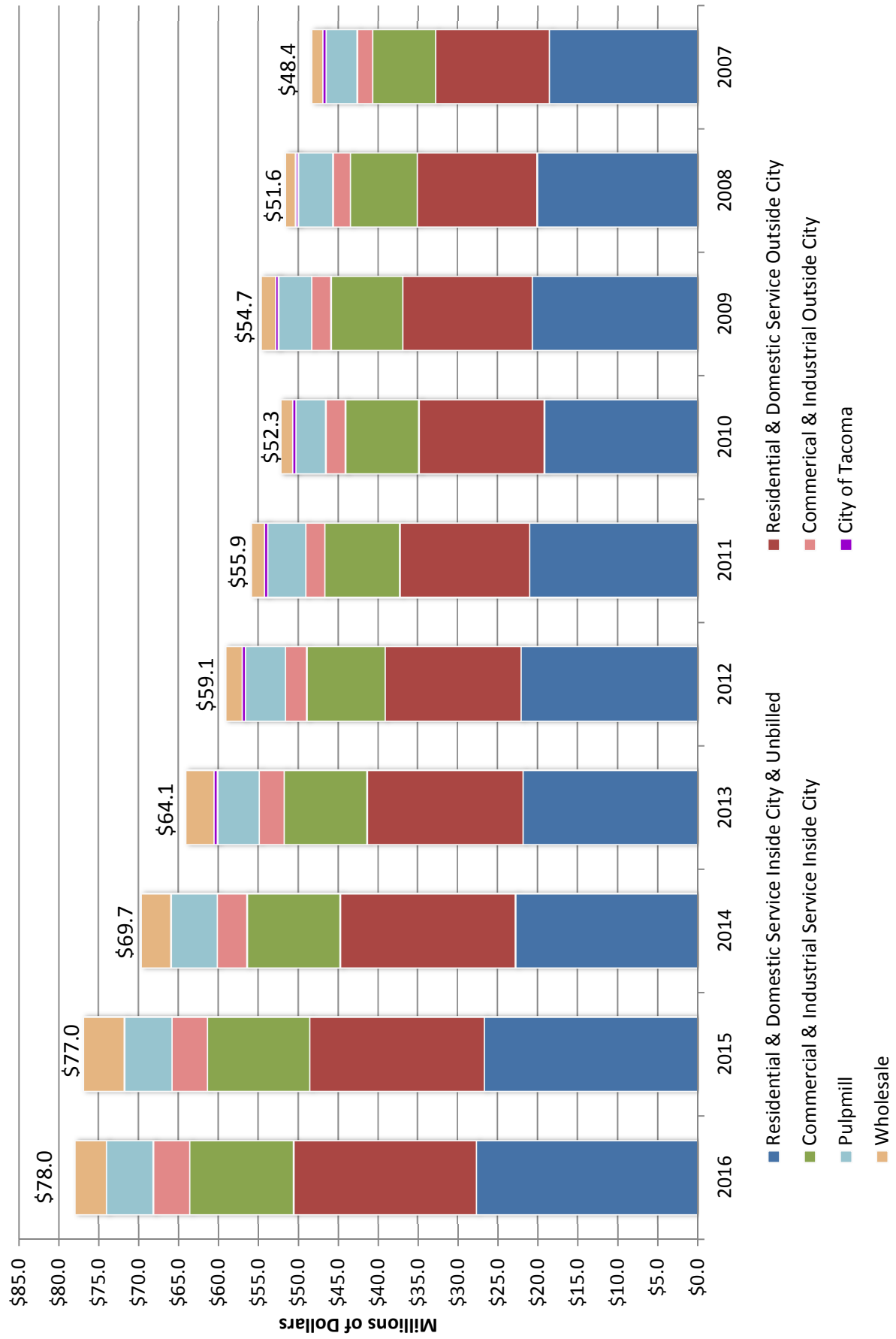
TOTAL OPERATING EXPENSES
Year to Date - December 2016
(\$75,355,921)



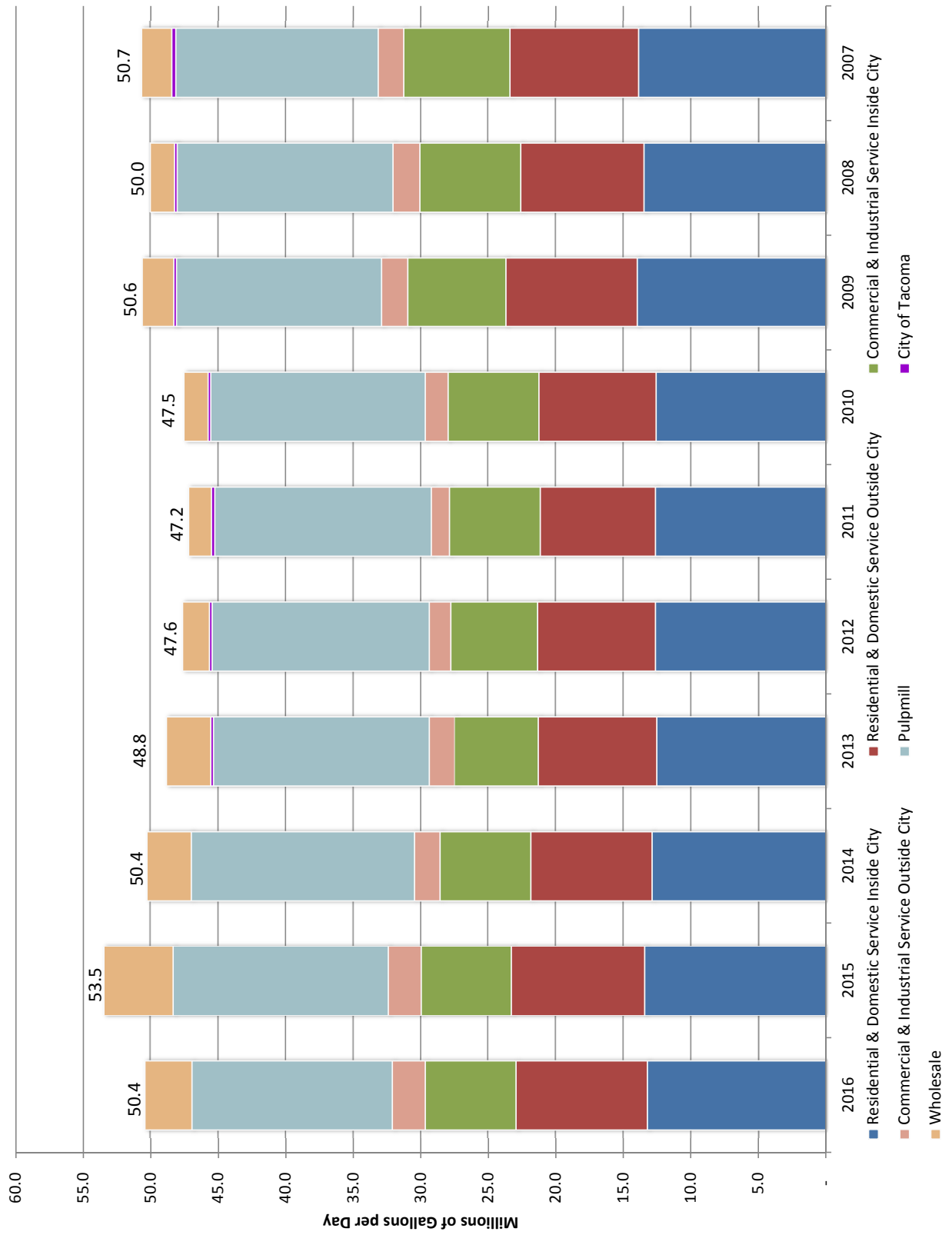
TOTAL OPERATING EXPENSES
Year to Date - December 2015
(\$63,588,011)



TEN-YEAR SUMMARY OF WATER SALES (MILLIONS OF \$)



TEN-YEAR SUMMARY OF WATER DEMAND (MGD)



TEN-YEAR SUMMARY OF O&M EXPENSE (MILLIONS OF \$)



2016 SUPERINTENDENT'S REPORT TACOMA WATER

Improved planning, community engagement, and emergency preparedness/response were the major themes of 2016 for Tacoma Water.

Community Engagement

Following the 2015 drought, starting the year with snow in the mountains was a welcomed event. Although spring came early and was unusually warm, snowpack and rainfall were adequate to support water demands and instream flows through the summer and fall. In spite of that, concerns regarding water supply were heightened in the community.

On the heels of asking customers to voluntarily reduce their water use to preserve flows for fish in the fall of 2015, a methanol plant requiring 10.4 million gallons per day of water (20% of our average day demand) announced their intent to locate in the Tacoma Tideflats. A vocal opposition to the project made the question of adequate water supply a primary issue with the intent to stop the project on that basis. Tacoma Water has a supply surplus that is projected to meet anticipated growth and development over the next 50 years with no new supplies needed. Although the proposed methanol plant would have been a significant new customer, the requested water use would have been available to meet their needs as was shared with the community through presentations, information and meetings. Ultimately, the plant proponents chose not to pursue the Tacoma location as a result of significant community opposition.

As a result of our experiences during the 2015 drought and the concerns expressed by the community about water supply, Tacoma Water developed a scope of work and consulting contract for an Integrated Resource Plan (IRP). The IRP will be a priority project in 2017.

As the country learned the extent of the lead issues in Flint, Michigan, all water systems took a deeper look at their own exposure and compliance. Tacoma Water generally has very little lead pipe in its system and effective corrosion control of its water sources. Even so, a series of high lead samples in the spring became a very public issue with considerable media and customer engagement. Tacoma Water took a proactive approach to engaging the media and customers throughout the process of further analyzing and understanding the cause of the concerning sample results, determining which customers were affected and developing solutions to resolve the problem. Tacoma received positive feedback from both customers and policymakers for being open and transparent throughout the event.

Emergency Preparedness

Given the sensitivity of lead in drinking water, when Tacoma Water found high lead levels in some voluntary sampling it did, an incident command structure (ICS) was implemented to oversee the handling of the event. This became a coordinated structure with local and State Health agencies. It was the first time Tacoma has used ICS to

manage a water quality event and the experience provided good insight into areas for improvement and challenges of coordinating with multiple agencies and policy makers. Overall use of ICS for this event helped to assure good coordination of activities, messaging and management of priorities.

Tacoma and the region are located in an area vulnerable to seismic activity and as such emergency preparedness for events such as earthquakes is very important to our service commitment to our customers. The City of Tacoma and Tacoma Public Utilities participated in a multistate exercise in June that was based on a 9.0 earthquake occurring just off the west coast along the 700 mile Cascadia Subduction Zone. The earthquake scenario included a large tsunami, landslides, and many aftershocks in the days and weeks following the initial earthquake. In the scenario, infrastructure for the region (including roads, communications, and healthcare) were significantly damaged and the death toll in the Pacific Northwest was projected to exceed 10,000. The Cascadia Rising exercise was an opportunity for governments at all levels (cities, counties, state agencies, and Federal officials, military and tribal nations) as well as non-governmental organizations and private companies to coordinate disaster operations, identify planning gaps and solidify relationships between response organizations. Tacoma Water fully participated in this comprehensive drill by involving over two thirds of our organization in the 3-day drill.

The exercise was a successful implementation of our emergency response plan, and many lessons were learned. The after action report and formalized lessons learned were documented and shared with City of Tacoma Emergency Management, Pierce County Department of Emergency Management, and State of Washington Department of Emergency Management. A performance improvement plan was developed and presented to the Public Utility Board.

Planning

Tacoma Water, through the development of our Asset Management Framework, and in addressing the initiatives identified in our Strategic Plan, has focused on improved planning and decision making, especially as it relates to the work we do on our infrastructure. As data becomes more available and analysis capabilities have expanded, strategic asset plans and maintenance strategies are driving decision making about the work that Tacoma Water performs on the system. Advancing planning and scheduling of operations and maintenance work was a significant 2016 effort along with further development of economic models to project optimal replacement timelines for system components. All of this enhanced planning and analysis became the foundation for capital business cases and decision making incorporated into the 2017/2018 budget request. The resulting budget proposal was successfully adopted by the Public Utility Board and City Council.

As a tribute to the progress Tacoma Water is making in the area of planning and decision making, we were honored to be recognized by one of the premier professional associations for drinking water utilities. Tacoma Water was one of 10 utilities nationally

to receive the Association of Metropolitan Water Agencies (AMWA) Platinum Award for Utility Excellence.

The award is based on ten attributes determined to define effective management: Strategic Business Planning, Measurement, Continual Improvement Management Framework, Product Quality, Customer Satisfaction, Employee and Leadership Development, Operational Optimization, Financial Viability, Infrastructure Stability, Operational Resiliency and Community Sustainability. Tacoma Water received recognition for:

- Strategic planning and execution
- Construction and startup of the Green River Filtration Facility
- Significant natural resource enhancements and habitat work in the Green River Watershed
- GIS implementation
- Asset management program development

The award is a reflection of Tacoma Water's focus on both day-to-day and long-term planning.

Strategy Management

Tacoma Water has addressed a number of the issues identified in the 2012 strategic plan, and continues to make strategic progress on the remaining areas. 2016 was our fourth year of using a Balanced Scorecard approach to manage strategic work. Each year the strategy map is updated to identify the strategic objectives that will be addressed in that year. Through strategy management efforts Tacoma Water has worked to ensure that the strategic work is prioritized, adequately resourced, actions are planned, progress measured, and issues resolved. This discipline was again put to the test in 2016 with the unanticipated lead effort that employees needed to be diverted to.

An impressive 18 initiatives were completed in 2016, which is a reflection of the substantial strategic progress Tacoma Water is making while continuing to provide a high level of reliable, safe, clean water at affordable rates to our customers. An example of one of the initiatives completed is the employee performance and development initiative. The water industry, as is the case with most businesses, is undergoing significant change due to technology, customer expectations and regulatory pressures. This affects the workplace and our employees. Tacoma Water, in its commitment in effectively supporting employees to adapt to all of this change, assigned a cross functional employee team to identify the knowledge, skills, information and tools needed by each of our employees to be successful in this new environment.

Over the past year, the team documented training and development currently available. This inventory identified a wealth of great ideas and approaches to employee development already taking place throughout our organization. Additionally, interviews with employees were conducted for their perspective on the topic.

The final report includes recommendations that will lead to individualized training plans for all of our employees and a number of other unique development programs. Further work in 2017 will flush out the program and management's commitment to employee development.

ASSET & INFORMATION MANAGEMENT

Asset Management

Tacoma Water made inroads into better understanding and documentation of current business processes associated with work management and the data that we collect on our assets.

Strategic Maintenance Management Program (SMMP)

Tacoma Water's SMMP is a strategic approach to our maintenance practices to ensure that we are doing the right maintenance on the right equipment at the right time. Doing so increases system reliability, lowers risk, provides better service for our customers, produces data needed to drive decision making and delivers long term value to our ratepayers. In 2016, the Asset Management group partnered with the Water Supply and Water Quality sections to focus attention on planning both preventative and corrective maintenance activities. As a result our maintenance library grew to include almost 200 maintenance procedures documented in SAP. These procedures document both the specific steps and tools and resources needed.

Buildings, Structures & Grounds Strategic Asset Management Plan (SAMP)

In 2016, the Buildings, Structures and Grounds SAMP produced, for the first time, a detailed registry in SAP of over 140 Tacoma Water buildings and structures. This registry also documents the building materials, construction types and site details (bathrooms, fencing, alarms, lighting, gutters, etc.). Additionally, each building or structure was photographed and an indexed photo library was created in Sharepoint that allows for easy search of these photos by site or by the type of equipment.

Business Process Documentation and Data Lifecycle

In support of planning and scheduling, Water Supply Operations and Maintenance group, defined roles and responsibilities associated with identifying, planning, completing and closing out work. This effort provided insight into current business processes and led to development of improved, formal work management. While it is not perfect, it continues to undergo improvements which suggest it is succeeding in being a living document.

In support of improving data integrity, two strategic initiatives were created to focus on the data lifecycle for our valves and pressure reducing valves. Cross functional teams from Finance, Maintenance, Operations, Information Management and Engineering backgrounds were formed to document the steps

in the lifecycle of these assets and determine what data/information is required and how it is kept current. The end result was an understanding of the amount of documentation required to maintain current records and an appreciation by all parties of the role played by each participant in the process.

Both of these efforts provided a glimpse into the amount of work that lays ahead for Tacoma Water as we seek to establish a more formal system of consistent work processes and data integrity.

Information Management

Smart Water Vision

In 2016, Tacoma Water had a goal to document Smart Water opportunities and options - specifically what solutions have been implemented around the world and how successful they have been. A Tacoma Water team reviewed industry literature, conducted a site visit to Halifax Water and attended Smart Water conferences to educate themselves on what is available. Their learnings and considerations for moving forward with Smart Water are captured in a report.

Big Bang

We completed the Big Bang project, populating the SAP keys on all of our service connections (meters). With the functional location, connection object and device location on each point, we are now able to acquire current address and other meter attributes directly from SAP, saving on manual entry and most importantly, ensuring our systems of record match. We started the year with 12,000+ targeted fixes and completed the project at the end of December with the help of several staff from Distribution Operations.

BlueWave (GIS)

Our GIS system continues to be updated to meet new needs of our workforce. Several improvements were implemented this year including an improved SAP interface, the addition of a new flushing application, 2015 imagery, project reports, and saved custom views. We also made progress towards a single sign-on, now using our network login for added system security. Four training sessions were held last summer to help staff transition to use of version 3 of the software. We continued our GPS project to improve the spatial accuracy of our maps. This highly successful project is a partnership between Distribution Engineering (GPS capture), Distribution Operations (locating) and Information Management (digital adjustments). During 2016, we completed 25 areas both in the county and in University Place. This work revealed 588 new services that were never mapped (acquired areas) and resulted in the completion of over 700 DOs.

Counter Maps Retired

The paper counter maps used at the Permit Counter were very out-of-date but had important hand-written notes on them that our staff needed to retain. In order

to address the concerns, transfer of the hand-written notes into permit notes on BlueWave was completed. The counter maps were also scanned and are now available for viewing by clicking on the map grid layer on BlueWave.

WATER QUALITY

Lead

In 2016, The Water Quality Section embarked on a project to solve a challenging objective: Determine the number and location of legacy lead goosenecks, and determine if they pose a threat to customers.

In April, 2016, initial testing results from the meter location to four homes showed high lead levels, triggering a major response and communication effort to determine the magnitude of the problem, and to provide customers timely and accurate information. We worked closely with our Community and Media Services Manager and staff, local and state public health officials, and other major water utilities to maintain consistent and clear messages as information developed.

We learned that our treatment processes are indeed effective at controlling lead corrosion. Our regulatory testing for lead and copper at over 70 homes in the summer of 2016 further confirmed this. However, we also learned that certain operational steps can liberate small particles of metal that contain lead, resulting in potential short term exposures. We have modified operational practice and advice to customers accordingly.

While this was a difficult period for the utility, the openness and directness of the response did receive positive reaction from regulators, utility and city leaders and some media.

To further bolster customer confidence, Tacoma Water initiated a program for in-house testing for any customer with concerns. At year end, 841 testing kits had been requested and mailed; 356 kits have been returned, and all but two results have been very low. Those two elevated results have been further investigated, a plumbing fixture was replaced in one case, and follow-up samples at both locations came back very low.

Filtration Operations

The Green River Filtration Facility completed its first full year of operation in 2016, and though minor modifications have been implemented along the way, the plant has continued to perform very well. Finished water quality is extremely consistent, and we have seen the dividends in that higher quality water through reduced chlorine need, reduced formation of regulated disinfection byproducts, better stability of chlorine to the far reaches of the system, greatly reduced deposition of silt and dirt in our distribution and storage systems.

Emergency Response Drills

The Watershed Management group led a planning effort and exercise in coordination with the Burlington Northern-Santa Fe railroad, and the US Army Corps of Engineers, simulating a locomotive derailment. We believe this to be an important risk issue, and this coordinated response is a strong step forward in preparedness in this area.

Water Quality personnel were also actively engaged in the Cascadia Rising exercise, and learning from that activity continues to shape our emergency response planning.

Water Supply Forum - Resiliency

In an unprecedented planning effort spanning three counties, the Water Supply Forum (Pierce County, King County and Snohomish County) came together to help the central Puget Sound region better prepare for the impacts of risks to water supply due to a variety of events. The project was driven by recognition on the part of the Forum members that the Central Puget Sound is susceptible to a variety of natural threats, such as earthquakes, severe storms, wildfires and drought, all of which have the potential to disrupt the delivery of safe and reliable water. Although the region's water utilities currently manage their own systems for a variety of risks, the Forum recognized the importance of leveraging regional resources to better prepare for potentially major water supply disruptions. Phase I of the project focused on evaluating risks to water supply and infrastructure under four phenomena: seismic, water quality, drought and climate change.

For each risk topic, a utility-led team was formed that included Forum representatives from multiple agencies, augmented by risk-area consultants. After 15 months of evaluations and collaboration, the risk teams have prepared a report of initial conclusions and recommendations. The report was published late in 2016.

Tacoma Water and the Forum were named by The Ash Center for Democratic Governance and Innovation at the John F. Kennedy School of Government, Harvard University as one of the 2017 Bright Ideas in Government initiative in government policies, initiatives and best practices.

The group was selected for its work across jurisdictional boundaries to identify potential challenges to the region's water supply and determining impacts and potential mitigation strategies with a goal of ensuring safe, reliable quality water to the region's 2.3 million residents and businesses.

Based on the Phase 1 recommendations, the Forum has identified additional evaluations for Phase 2 of the Resiliency Project to better understand water system vulnerabilities in the region and measures that could mitigate these risks. This work will begin in 2017.

WATER SUPPLY

Operational Wells

Well availability plays a critical role in ensuring adequate backup supply for the Green River, Tacoma's primary water source. In order to monitor and drive reliability of water supply we have begun to use the measure of "total minimum well capacity available" to ensure annual readiness under a range of conditions including drought and the potential loss of river supply due to a variety of events such as a treatment plant malfunction, intake failure, or poor river conditions. This new performance measure will drive maintenance and capital decisions related to the amount of backup well supply that will be available. In 2016, the total minimum well capacity available is based on comparing the Average Day Demand with the level of readiness achieved during the 2015 Drought (48 MGD approximately). An additional buffer of approximately 5-7 MGD was added to allow for mechanical failure of 1-2 wells while still maintaining the established capacity needs.

We have also changed our maintenance practices and priorities to dedicate our resources to the wells we use most often. Wells used less frequently have a lower priority for maintenance and attention.

Planning & Scheduling

We continue to create and improve Preventive Maintenance (PMs) plans for all maintenance work that we do. Many of the PMs that we have developed will need refinement and modification by the Strategic Asset Management Plans (SAMPs) moving forward, but they now form the backbone of how maintenance work is performed in Supply.

We currently generate over 60 percent of our work directly via SAP preventive or corrective orders. New asset management planning work in 2016 for buildings, structures, and rights-of-ways will improve the SAP generated maintenance orders to capture over 80 percent of our work. There are still many opportunities to improve and expand the work captured, and we will continue our efforts going forward.

Information from PM plans improved the inputs to the 2017/2018 budget proposal. We continue to develop strategic maintenance plans and perform more of our work through formal planning and scheduling. Data from the PMs will serve as an indicator of whether sufficient resources are available to complete needed work; it will also be the basis for the priorities requested in future budgets.

Microwave System

The West McDonald Ridge Microwave site was first established in 2012 and is a Tacoma Water owned and operated microwave relay station. The site relays SCADA and Corporate Network traffic between the main TPU administrative building and the Headworks facility and is located approximately two miles northwest of the Headworks facility.

Since its construction the site has been powered by two generators that alternate weekly to provide primary power. This was an interim solution while a more permanent power source was acquired. A Business Case Evaluation and alternatives analysis study was conducted to determine what the most cost effective method to provide reliable power would be. Alternatives investigated included: Solar, Wind Turbines, Hybrid renewable sources, Solid Oxide Fuel Cells and Hydrogen Fuel Cells. Although representative of some excellent technologies, constructing an underground medium voltage utility power source was determined to be the preferred alternative.

The new medium voltage power feeder to the Microwave site was constructed in 2016. The project involved installing 3,100 feet of buried conduits, utility vaults, installation and testing of medium voltage power cable, exposing and intercepting the existing utility power feeder, and installing the transformer. The project scope also included redirecting the power feeder and the subsequent construction of 900' of new forest road and improved turn-around and parking capabilities.

Construction and testing was completed in mid-November of 2016. The generators were finally turned off (after each ran for over 17,000 hours) and the site now has permanent power fed from a medium voltage underground distribution feeder.

Water Rights

Tacoma Water has a number of water rights in our source portfolio. We have two surface water rights – the First Diversion Water Right (FDWR) and the Second Diversion Water Right (SDWR) – that rely on storage and release of water to satisfy regulatory conditions. We also have numerous groundwater rights that play an important part in our source portfolio. As we embark on the Integrated Resource Plan and Water System Plan in 2017, and with the drought of 2015 still very fresh in our minds, a firm understanding of these foundational source documents is essential.

We have undertaken a legal review with an outside legal source to ensure that the current legal and regulatory landscape with regard to water rights is fully understood and able to be factored into our planning. The research will check for cases and legal authorities in other jurisdictions regarding federal projects and water rights issues similar or comparable to ours. Documents from Tacoma Water, the Washington State Department of Ecology, and federal agencies will also be considered in our review. In 2016, we submitted applications to extend 3 groundwater rights in permit status, and are continuing to work towards perfection of the Second Diversion Water Right (SDWR) on the Green River.

WATER RATES & FINANCIAL PLANNING

Budget Development and Adoption

Tacoma Water's 2017-2018 biennial budget was unanimously adopted by the City Council on November 22nd, 2016. This budget was developed by staff across Tacoma Water, and features a 4.0% system-wide average annual rate increase and a \$48 million biennial capital budget. This capital budget was developed using business case

evaluations that document the justification for each capital planning decision, with projects of \$200,000 or more receiving the most rigorous alternatives analyses.

Project Management

In order to improve our ability to deploy capital projects and achieve organizational visibility into their status, we did significant work on strategic initiatives to develop a capital project management framework for Tacoma Water. "Project Status Reports" were developed for a sample set of capital projects in 2016, which provide quarterly insights into scope, schedule, budget and resourcing, identifies risks and issues as well as the current strategy to mitigate for them. A cross-functional team developed an action plan for the full deployment of project management tools, capabilities and programs for Tacoma Water. Intermediate project management training was also provided to that group. This work lays the foundation for further development in coming years, to include the expansion of project management principles to include more than just capital projects.

Economic Development Study

Tacoma Water hired FCS GROUP to provide an independent economic competitiveness assessment and expert review of cost of service rates. The findings are intended to provide policymakers with current information regarding customer trends, demographic/economic forecasts, cost of service, comparative water rates and charges, and a basis for system development charge (SDC) adjustments. With this economic review and analysis future decisions to alter Tacoma Water's fees and charges will be informed with a broad economic understanding of our service territory and its competitiveness from an economic development perspective. Tacoma Water reviewed findings from this work with the Public Utility Board in late 2016. Staff will bring some of these findings back as part of a more comprehensive policy package in 2017 for Board consideration.

Advanced Metering Infrastructure

Advanced Metering Infrastructure (AMI) has been under consideration at TPU for about 10 years, and during that time the cost of the technology has fallen as the capabilities have increased. In 2016, Tacoma Water participated in the development of a TPU business case evaluation of a joint water and power deployment of AMI. Additionally, a water-specific business case evaluation was also conducted to further clarify the potential benefits that can be realized from implementation of this technology. These business case evaluations provided a preliminary indication that AMI cannot be justified using strictly quantifiable benefits. But because this technology enables the potential realization of a host of softer benefits, it could be justifiable if we can develop a robust plan to achieve those softer benefits. In 2016, TPU began the development of those plans, to include program governance and charters for an AMI program.

Demand Forecast Updated

In support of improved system and financial planning, Tacoma Water developed two distinct demand forecasts with differing objectives in mind, each of which was addressed by a separate model, developed with a slightly different methodology. (1)

The Short-Term Forecast focuses on revenue-generating demand and accounts to project revenue for a 10-year planning horizon. This forecast informs the establishment of the revenue requirement, and aids in conducting the cost of service analysis and rate design efforts. (2) The Long-Term Forecast examines potential source-of-supply constraints and wholesale/large volume customer contracting demand risks when used in conjunction with the Tacoma Water Supply group's Source-of-Supply Model. Both models in 2016 were streamlined, semi-automated, and updated with current data to provide Tacoma Water more timely and actionable forecasting results. In addition to structural improvements, staff worked to improve the accessibility and transparency of the models by uploading the results and models to SharePoint and incorporating the results into live displays on SharePoint.

DISTRIBUTION ENGINEERING

One-Stop Permitting

Tacoma Public Utilities consolidated all services to the main floor lobby which included Tacoma Water's customer support counter. A new Qmatic queuing system was installed to serve walk-in customers and eliminate the customer experience of waiting in line. New conference rooms were built, paper forms were automated, and data was consolidated from various computer systems for ease of use. Improvements to the phone system resulted in less hold/wait time and better customer satisfaction.

Conservation and Efficiency Programs

Tacoma Water helped residential customers save water and reduce their bills by giving out over 900 water efficient showerheads and over 800 sink aerators. Our rebate program for commercial and industrial customers remains strong, and includes the completion of a water-recycling laundry facility at Pierce County Jail. This project will save over 2 million gallons of water per year. Our staff attended nearly 30 community events in 2016, engaging with citizens and community members on topics of water conservation.

System Acquisition

In November 2016, the membership of the Curran Road Mutual Water Association voted in favor of negotiating an acquisition agreement with Tacoma Water. Curran Road is a long standing wholesale customer with more than 620 service connections. As part of the acquisition, Tacoma Water proposes to make \$12M in system improvements over an 8-10 year period. The cost of the system improvements will be paid for through a customer surcharge. By transitioning the Curran Road wholesale account to 620 retail accounts, Tacoma Water will increase annual revenue by \$100K/year.

Main Replacement Program

8.3 miles of new distribution main was added to the system and 26 design plans were completed for new developments. Approximately 3.2 miles of distribution main were replaced in 2016 as prioritized through our distribution main economic model. The continued use and refinement of our economic model allowed Distribution Engineering

to complete more than 30 business cases and various other studies to provide input to our 17/18 biennial budget planning.

Distribution Engineering reviewed more than 100 street sections identified for paving with Proposition 3 funding by the Department of Public Works. During review of the street sections, Distribution Engineering assessed Tacoma Water's assets to determine if water mains, valves, or hydrants needed to be replaced prior to paving.

Tacoma Water has worked with the Department of Public Works and Sound Transit to develop 60% plans for the expansion of the Tacoma Light Rail system. Due to the location of the proposed tracks, more than a mile of water main will need to be replaced to facilitate the construction of the Light Rail Extension. Tacoma Water staff has coordinated our design with that of the Sound Transit consultant, in an effort to minimize errors during construction.

Condition Assessment

Tacoma Water completed two contracts for non-invasive condition assessment testing on asbestos cement water mains. Between the two contracts more than 17 miles of water main were tested. The condition assessment information will be used to inform future business case evaluations.

Decant Facility

Tacoma Power and Tacoma Water have collaborated to construct a shared facility in which the water/soil mixture resulting from vacuum hydro excavation is properly managed. In response to concerns from the Tacoma Pierce County Health Department, the new facility will comply with requirements for the handling of solid waste, and protect groundwater resources in the South Tacoma Groundwater Protection District. In conjunction with the new decant facility, Tacoma Water developed a soil management plan that provides clear direction to staff as to how soil excavated on Tacoma Water projects is to be sampled, tested, handled and ultimately disposed of.

DISTRIBUTION OPERATIONS

Construction

New water service installations were down slightly from the previous year at 844 and the number of new meter installs increased significantly to 1,037. The numbers reflect steady pattern of growth over the past few years.

Operations

In 2016 the system experienced 36 main breaks with an average response time of 44 minutes. This is well below industry averages and reflects a highly reliable water system.

Soils Management

In conjunction with Tacoma Power and while permitting and final plans are being developed for a permanent facility, a temporary Vactor truck decant facility was permitted and constructed.

Meters

A program to replace meters with extremely high consumption to assure they are accurately registering usage resulted in 3,765 new meters.

360 meter exchanges for meters are no longer working. Of that number, 66 were new non-mechanical (electromagnetic) meters.

Flushing

The unidirectional flush teams cleaned 273 miles of main in 2016, approximately 20% of the distribution system. Additionally 2,135 dead end mains were flushed.

Planning

In 2016, Distribution Operations engaged a consultant to complete an assessment of planning and scheduling of work and recommended next steps for improving how we plan and schedule our work. Results of the assessment were shared with all Distribution Operations staff in report format and discussed during crew meetings.

The assessment, completed in June, included a review of documents, schedules and processes gathered during interviews with more than 40 employees representing operations, maintenance, engineering and our water warehouse. Beginning in 2017, work to take the next steps will begin. A steering committee will guide the effort and will first create the change management plan, communication plan and a complete process documentation study.

Safety

A heightened focus on safety resulted from the review of benchmarks for injury incidents and lost time accidents at Tacoma Water versus at other water utilities. Our performance is not what we would like it to be. In order to improve our safety outcomes we will be involved in a safety program assessment for Tacoma Public Utilities in 2017. Safety culture awareness was enhanced with attendance at monthly safety meetings by water managers. At least one manager will attend and participate in each meeting. Monthly safety huddles were conducted with each work group on a range of topics. Impromptu safety audits were conducted by safety committee members and identification of opportunities for improvements were discussed with responsible persons.

Linda McCrea
Water Superintendent



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